DOCUMENT RESUME

ED 058 484 AA 000 788

AUTHOR	Fahey, Frank J.
TITLE	Economic Problems of Nonpublic Schools.
INSTITUTION	Notre Dame Univ., Ind.
SPONS AGENCY	President's Commission on School Finance, Washington, D.C.
PUB DATE	Oct 71
CONTRACT	OEC-0-71-0968
NOTE	669p.; Prepared by the Office for Educational Research
EDRS PRICE	MF-$0.65 HC-$23.03
DESCRIPTORS	Case Studies; Catholic Parents; Catholic Schools; *Changing Attitudes; *Cost Effectiveness; Data Analysis; Data Collection; *Economic Factors; *Educational Finance; Elementary Schools; Enrollment Trends; Financial Policy; Income; Parent Attitudes; *Private Schools; Projects; School Role; Secondary Schools; Standards; Urban Areas; Values

ABSTRACT

A project that obtained secondary data images on all nonpublic schools, secular and sectarian, in the United States is described. Original data were gathered for five in-depth case studies. This project was limited to an analysis of nonpublic schools through grade 12; it included several subdivisions. Studies on nonpublic schools were conducted in the following areas: (1) attitudinal demand, (2) present enrollment and projection of future enrollment, (3) costs and revenues with concomitant projections, (4) estimates of marginal costs to public schools resulting from nonpublic school failure, (5) in-depth analyses of costs, revenues, and marginal transfer costs in five selected cities, (6) a secondary analysis case study of determinants of enrollments in Catholic schools, and (7) an examination of criteria for aid to nonpublic schools with implications for public policy. It was found that: (1) American Catholics want their children to receive some formal religious instruction; (2) Nearly all Catholics are cognizant of the distinctiveness of both parochial and public schools; and (3) Quality assessments of educational programs, and subsequent decisions as to where to enroll one's children appear to be a function of one's personal set of education-related priorities. (For related document, see ED 058 473.) (Author/CK)

Economic Problems of Nonpublic Schools

Prepared by
The Office of Educational Research
University of Notre Dame

Submitted to The President's Commission on School Finance

THIS IS ONE OF SEVERAL REPORTS PREPARED FOR THIS COMMISSION. TO AID IN OUR DELIBERATIONS, WE HAVE SOUGHT THE BEST QUALIFIED PEOPLE AND INSTITUTIONS TO CONDUCT THE MANY STUDY PROJECTS RELATING TO OUR BROAD MANDATE. COMMISSION STAFF MEMBERS HAVE ALSO PREPARED CERTAIN REPORTS.

WE ARE PUBLISHING THEM ALL SO THAT OTHERS MAY HAVE ACCESS TO THE SAME COMPREHENSIVE ANALYSIS OF THESE SUBJECTS THAT THE COMMISSION SOUGHT TO OBTAIN. IN OUR OWN FINAL REPORT WE WILL NOT BE ABLE TO ADDRESS IN DETAIL EVERY ASPECT OF EACH AREA STUDIED. BUT THOSE WHO SEEK ADDITIONAL INSIGHTS INTO THE COMPLEX PROBLEMS OF EDUCATION IN GENERAL AND SCHOOL FINANCE IN PARTICULAR WILL FIND MUCH CONTAINED IN THESE PROJECT REPORTS.

WE HAVE FOUND MUCH OF VALUE IN THEM FOR OUR OWN DELIBERATIONS. THE FACT THAT WE ARE NOW PUBLISHING THEM, HOWEVER, SHOULD IN NO SENSE BE VIEWED AS ENDORSEMENT OF ANY OR ALL OF THEIR FINDINGS AND CONCLUSIONS. THE COMMISSION HAS REVIEWED THIS REPORT AND THE OTHERS BUT HAS DRAWN ITS OWN CONCLUSIONS AND WILL OFFER ITS OWN RECOMMENDATIONS. THE FINAL REPORT OF THE COMMISSION MAY WELL BE AT VARIANCE WITH OR IN OPPOSITION TO VIEWS AND RECOMMENDATIONS CONTAINED IN THIS AND OTHER PROJECT REPORTS.

The President's Commission
on School Finance

Neil H. McElroy, Chairman
Mary T. Brooks
William G. Colman
Hilda A. Davis
John B. Davis, Jr.
John H. Fischer
Dorothy M. Ford
Norman Francis
Eugene Gonzales
Warren P. Knowles
David H. Kurtzman
Duane Mattheis
William E. McManus
Wendell H. Pierce
William G. Saltonstall
W. B. Thompson
Clarence Walton
Ivan E. Zylstra

Norman Karsh, Executive Director

ECONOMIC PROBLEMS OF NONPUBLIC SCHOOLS

A REPORT TO
THE PRESIDENT'S COMMISSION ON SCHOOL FINANCE

OFFICE FOR EDUCATIONAL RESEARCH
UNIVERSITY OF NOTRE DAME

ECONOMIC PROBLEMS OF NONPUBLIC SCHOOLS

Submitted to

The President's Commission on School Finance
in fulfillment of Contract No. OEC-0-71-0968
with the United States Department of Health,
Education and Welfare, Office of Education

By

THE OFFICE FOR EDUCATIONAL RESEARCH
UNIVERSITY OF NOTRE DAME
FRANK J. FAHEY, DIRECTOR

Project Director: Frank J. Fahey

Associate Project Director: Richard H. Metzcus

Project Coordinator: Reginald A. Neuwien

Principal Investigators: Ernest Bartell
Kenneth Brown
Arthur Corazzini
Dennis Dugan
Frank Fahey
Louis Gary
Richard Kiekbusch
Richard Metzcus
Thomas Swartz

Research Associates: Steve Brennan
Bonnie Katz
Frank Navratil
Susan vonHake
Charles Zech

Consultants: Frank Bonello
Eugene Campanale
David Dodge
Clark LaMendola
Neil McCluskey
James Norris, Jr.
John Wurm

Secretaries: Susan Antonovitz
Norma Davitt
Ruth Hagerty
Ellen Maher
Gloria Marks
Marion Metzger
Eloise Mihills
Alexis Shriver
Vivian Smith
Patricia Spurgeon

FOREWORD

The Economic Problems of Nonpublic Schools was a project conducted under the auspices of the President's Commission on School Finance (United States Office of Education Contract No. OEC - 0-71-0968). It was undertaken in response to a need for more adequate data relating to the economic and financial problems of nonpublic schools. The project attempted to obtain secondary data images on all nonpublic schools, secular and sectarian, in the United States. Original data were gathered for five in-depth case studies.

The Economics of Nonpublic Schools was limited to an analysis of nonpublic schools through grade twelve. The project included several subdivisions. Studies on nonpublic schools were conducted in the following areas: 1) attitudinal demand; 2) present enrollment and projections of future enrollment; 3) costs and revenues with concomitant projections; 4) estimates of marginal costs to public schools resulting from nonpublic school failure; 5) in-depth analyses of costs, revenues and marginal transfer costs in five selected cities; 6) a secondary analysis case study of determinants of enrollments in Catholic schools; and, 7) an examination of criteria for aid to nonpublic schools with implications for public policy.

Each subdivision of the report was prepared by an expert in the field with assistance and support from the Office for Educational Research and the Social Science Training and Research Laboratory, University of Notre Dame. The major portion of the report was the product of the efforts of six economists. These scholars worked in close collaboration with each other and the project staff. The economic analysis was divided among them into more or less discrete parts. Then, they shared a common data base and frequently interacted as checks on each other.

Accordingly, credit for the project cannot be limited to one or two individuals, but is shared in common by the principal investigators, consultants, and project staff.

Two reports of this project have been published. The first is a substantive summary report. It provides a brief overview of the major findings of the project. The second report is a compendium of studies conducted on the several parts of the project. Each study contains complete identification of data sources, methodologies and limitations of analysis.

Frank J. Fahey
Richard H. Metzcus

University of Notre Dame
October, 1971

TABLE OF CONTENTS

Foreword iii

I. Attitudes Toward Nonpublic Education 1
Frank J. Fahey and Richard G. Kiekbusch
University of Notre Dame
Appendix A 513

II. Enrollment in Nonpublic Schools 155
Kenneth M. Brown, University of Notre Dame

III. Costs and Revenues of Nonpublic Elementary and Secondary Education: The Past, Present, and Future of Roman Catholic Schools. 211
Ernest J. Bartell, C.S.C., Stonehill College
Appendix B 552

IV. The Non-Catholic Private School 283
Arthur J. Corazzini, Tufts University

V. The Estimated Marginal Costs of Absorbing All Nonpublic Students Into the Public School System 301
Thomas R. Swartz, University of Notre Dame
Appendix C 576

VI. Financial Projections for Diocesan School Systems: Selected Case Studies 351
Ernest J. Bartell, C.S.C., Stonehill College

VII. Estimated Marginal Costs of Absorbing Nonpublic School Students in Five Public School Systems: Selected Case Studies 364
Thomas R. Swartz, University of Notre Dame
Appendix D 610

VIII. The Determinants of Enrollment in Catholic Schools: An Empirical Analysis of the Archdiocese of St. Louis 386
Dennis J. Dugan, University of Notre Dame
Appendix E 618

IX. Some Comments on Public Aid to Private Schools 446
Arthur J. Corazzini, Tufts University

X. Safeguarding the Public Interest 460
Louis R. Gary, Implications Research, Inc.

XI. Appendices 513

A. Attitudes Toward Nonpublic Education 513

B. Costs and Revenues of Nonpublic Elementary and Secondary Education: The Past, Present, and Future of Roman Catholic Schools 552

C. The Estimated Marginal Costs of Absorbing All Nonpublic Students Into the Public School System 576

D. Estimated Marginal Costs of Absorbing Catholic School Students in Five Public School Systems: Selected Case Studies. 610

E. The Determinants of Enrollment in Catholic Schools: An Empirical Analysis of the Archdiocese of St. Louis 618

F. The Economics of Minority Education in Catholic Schools. 628

G. Projection of Catholic School Enrollment For 1975 and 1980, By State and Region 651

I. ATTITUDES TOWARD NONPUBLIC EDUCATION

Frank J. Fahey and Richard G. Kiekbusch

CONTENTS

I. Introduction 3

II. Methodology 10

III. Analysis 13

IV. Summary and Conclusions 151

Appendix A 513

I. INTRODUCTION

Research[1] indicates that attitudes are not direct determinants of subsequent behavior, nor even entirely dependable criteria upon which to base predictions of overt conduct. Rather, their impact upon human behavioral patterns appears to be "filtered" through other intervening variables (e.g., perceived reference group norms)[2]. Nevertheless, attitudes do contribute, within a network of multiple causation and variable interaction, to human behavior.[3] Moreover, they are perhaps the most measurable of all contributors. Insofar as the exercise of educational choice (parental selection of schools in which to enroll offspring) is a mode of behavior, it would seem that a knowledge of the relevant attitudes of those involved (parents) might result in a greater understanding of that exercise, and possibly in a limited capacity to predict and even influence the selection of available alternatives. For these reasons the attitudinal survey represents an important methodological tool.

Historically, the attention given by the official church to the education-related attitudes of its laity has fluctuated. The earliest days of American Catholic education[4] witnessed the clergy and hierarchy responding to the pleas of an oppressed and frightened lay populace that schools be built. The latter were fearful lest their children lose the faith via attendance at what were perceived as heavily

Anglo-Protestant public institutions. Parochial schools served as buffers to these fears, as insurance against a diminishment of allegiance to the Roman Church. In short, lay convictions functioned as a driving force in the establishment and initial direction of Catholic education in this country.

Rome was apprehensive, however, regarding the unusual magnitude of lay influence in Church affairs--particularly those of an educational nature--evident in the United States. Envisioning a democratization so extreme that American parochial schools would cease to be truly Catholic, the hierarchy made periodic efforts to curb the extent of that influence. The principal object of those efforts was the system of lay trusteeism--the finest flower of lay control--operant in many American diocese. In fact, a series of confrontations between the clergy and lay boards of trustees in the Diocese of Philadelphia proved to be the "straw that broke the camel's back." The arrival of the Most Rev. Francis Patrick Kenrick, D.D. as coadjutor and administrator of that diocese marked a new era in the American Church's relationship to the laity. Nolan writes:

> He (Kendrick) arrived in Philadelphia on July 7, 1830, and within a year (May 28, 1831, when St. Mary's Church was reopened after an interdict) the courage, the determination, and the zeal displayed by the young Administrator put an end to the outrages of the Trustee System and permanently settled the question of lay interference in Church affairs.[5]

Thus, the impact of laymen upon educational decision making and policy formulation was lessened considerably (and continues to be minimal to this day). Subsequent decades saw the official Church assume the role of primary, if not sole, planner and implementer of educational programs, apparently taking for granted the constancy of the motivations, tastes, and very socio-cultural make up of its clientele.

Recent critical developments (e.g., declines in enrollment) however, indicate that the Catholic school, in addition to having become a rather costly commodity, has lost much of its former appeal. It continues to produce and distribute essentially the same product, but to a public the composition and priorities of which have undergone alteration. The attitudinal survey represents an attempt to tap the attitudes, and discover the tastes and preferences, of the market to which Catholic education now directs its product. What does "American Catholic 1971" want for his educational dollar? What must Catholic schools provide in order to maintain their clientele? What alterations are called for? In short, what is the nature and extent of the current demand for Catholic education in the United States? Perhaps now, more so than ever before, ex officio policy making must take cognizance of the attitudes of those who patronize the Catholic sector. In a sense, a return to the days of more vibrant lay participation, or at least a greater administrative sensitivity to lay opinion, is called for.[6] The ensuing pages represent an attempt to integrate and interrelate the findings of a diverse array of recent surveys of lay attitudes toward Catholic education.

In keeping with the economic focus of the overall report (Contract No. OEC-0-71-0968, "Economic Problems of Non-Public Schools"), as well as with stipulations specified in the governing proposal, the authors have elected to concentrate almost exclusively on a particular segment of the laity: Catholic parents of school-age children (with a few exceptions; i.e., some samples include Catholics who are not parents while others contain non-Catholics). Unlike others active in, or at least aware of, Catholic education (e.g., school administrators, teachers, students, single Catholics), parents hold the "purse strings." Their participation (if they participate) consists of contributing all of the students (their children) and much of the required financial backing. In short, parents provide the input, both human and monetary, with which the Catholic sector works, and without which it ceases to function. Both current and projected enrollments and revenues, then, are largely a function of this group's continued participation; and in turn, the nature and extent of this participation is, to some extent, dependent upon the group's attitudes toward Catholic education.

Footnotes

1. Social psychological research on desegregation has perhaps contributed most to our understanding of the relationship between attitudes and overt behavior. See, for example, Douglas W. Bray, "The Prediction of Behavior From Two Attitude Scales," Journal of Abnormal and Social Psychology, 45(1950): 64-84; Wilbur Brookover and John Holland, "An Inquiry Into the Meaning of Minority Group Attitude Expressions," American Sociological Review, 17 (April, 1952): 196-202; Melvin L. DeFleur and Frank R. Westie, "Verbal Attitudes and Overt Acts: An Experiment on the Salience of Attitudes," American Sociological Review, 23 (1958). 667-673; Lewis M. Killian, "The Adjustment of Southern White Migrants to Northern Urban Norms," Social Forces, 32 (October, 1953): 66-69; Bernard Kutner, Carol Wilkins, and Penny Yarrow, "Verbal Attitudes and Overt Behavior Involving Racial Prejudice," Journal of Abnormal and Social Psychology, 47(1952): 649-652; Richard T. LaPiere, "Attitudes vs. Actions," Social Forces, 13(December, 1934): 230-237; Lawrence S. Linn, "Verbal Attitudes and Overt Behavior: A Study of Racial Discrimination," Social Forces, 43(1965): 353-364; Milton Malof and Albert Lott, "Ethnocentrism and the Acceptance of Negro Support in a Group Situation," Journal of Abnormal and Social Psychology, 65(October, 1962): 254-258; and Gerhart H. Saenger and Emily Gilbert, "Customer Reactions to the Integration of Negro Sales Personnel," International Journal of Opinion and Attitude Research, 4(1950): 57-76.

2. An illustration may help to clarify. If one accepts the presence of heightened anti-Negro sentiments in the South, one might reasonably expect to find there an encompassing disdain for minority groups in general, of which anti-Negro sentiments are but a fraction. Such an expectation is reasonable, that is, if attitudes (in this instance, racially and ethnically founded) are the pervasive and independent determinants of behavior they are commonly thought to be. Research employing the famous F scale measure of authoritarianism (Adorno, T.W. Frenkel-Brunswik, Else, Levinson, D.J., and Sanford, N. The Authoritarian Personality. New York: Harper, 1950.), however, have indicated otherwise. Several studies, involving both student and adult samples have reported southern F scale scores well within the range of means of comparable non-southern groups (O. Milton, "Presidential Choice and Performance on a Scale of Authoritarianism," American Psychologist, 7, 1952: 597-598; T. F. Pettigrew, "Regional Differences in Anti-Negro

Prejudice," Journal of Abnormal and Social Psychology, 59, 1959: 28-36; and C. U. Smith and J. W. Prothro, "Ethnic Differences in Authoritarian Personality," Social Forces, 35, 1957: 334-338). Moreover, there is no evidence that the family pattern associated with authoritarianism is any more prevalent in the South than in other parts of the country (David, A., Gardner, B., and Gardner, Mary. Deep South. Chicago: University of Chicago Press, 1941; and Dollard, J. Caste and Class in a Southern Town. New Haven: Yale University Press, 1937.)

It seems clear, then, that the pronounced prejudice (predisposition to behave) and widespread de facto discrimination (actual behavior) evident in the South are not the outgrowths of deep-seated, highly compulsive authoritarian attitudes. Southerners, in fact, tend to be among the least anti-Semitic people in the United States, (E. Roper, "United States Anti-Semites," Fortune, 33, 1946: 257-260; E. Roper, "United States Anti-Semites," Fortune, 36, 1947: 5-10; R. H. Knapp, "A Psychology of Rumor," Public Opinion Quarterly, 8, 1944: 22-37; and E. T. Prothro, "Ethnocentrism and Anti-Negro Attitudes in the Deep South," Journal of Abnormal and Social Psychology, 47, 1952: 105-108). Conformity to cultural pressures is a more likely explanation (Pettigrew, 1959). Adherence to the stern racial norms of the southern culture appears to be unusually crucial in the South's heightened hostility toward the Negro. In short, such adherence represents the path of least resistance. When an individual's significant others (i.e., parents, boss, peers) are racially prejudiced, when his reference groups accept white supremacy as a given, when deviation spells ostracism, then discriminatory behavior is not so much expressive (of attitudes) as it is socially adjustive (to perceived reference group norms).

3. Fendrich stresses the multi-causality of human conduct, but also refers to attitudes as at least partially independent determinants of overt behavior. See James M. Fendrich, "Perceived Reference Group Support: Racial Attitudes and Overt Behavior," American Sociological Review, 32(1967): 960-970.

4. For a historical account of this early period in the history of American Catholic schools see Dunn, William K. What Happened to Religious Education? (Baltimore: Johns Hopkins Press, 1958). Several authors have attempted to furnish complete histories of Catholic education in this country. Three of the most frequently cited works are Burns, James A. The Principles, Origins, and Establishment of The Catholic School System in the United States (New York: Benziger Brothers, 1908); Burns, James A.

The Growth and Development of the Catholic School System in the United States (New York: Benziger Brothers, 1912); and Buetow, Harold A. Of Singular Benefit: The Story of U. S. Catholic Education New York: MacMillan, 1970). For a history of parochial education in one archdiocese see Sanders, James W., "History of Catholic Schools in Chicago," in Erikson, Donald A. Crisis in Illinois Non-public Schools (Research Report to the Elementary and Secondary Non-public Schools Study Commission, State of Illinois, 1970), chapter 10.

5. Nolan, Hugh J. The Most Reverend Francis Patrick Kenrick, Third Bishop of Philadelphia, 1830-1851. (Philadelphia: American Catholic Historical Society, 1948), Forward, p. VII.

6. While meaningful participation of laymen in educational policy making continues to be minimal, indications of a more genuine lay involvement in the near future (e.g., the establishment of parish and diocesan councils and boards of directors--in a sense, a return to the trusteeism abolished during the last century) are emergent.

II. METHODOLOGY

The present report represents a secondary analysis of recent studies of attitudes toward Catholic schools. The ensuing paragraphs contain a summary of the procedures which went into its making:

(1) Collection of Data. Initial work involved the collection of those studies the contents of which were to be examined and incorporated into the final report. The Office for Educational Research originally hoped to obtain all of the major attitudinal research on nonpublic education completed within the last five years. Particularly problematic was the absolute dearth of attitudinal surveys pertinent to independent and other-than-Catholic church-related institutions.[1] This shortage of data necessitated the eventual alteration of the format to include only findings from studies of Catholic schools (all recent attitudinal research on Catholic elementary and secondary education was subsequently obtained by OER).[2] The inclusion in Appendix A of findings of a recent national survey of attitudes toward nonpublic schools, however, lends some breadth to the report. Appendix A also contains a list of sources contacted,[3] as well as an annotated bibliography of studies actually utilized in the construction of the finished product.

(2) Analytical Framework. Of no less importance than the collection of data was the structuring of an analytical framework within which to analyze it. Ordinarily, the shape of such a framework is determined by those questions which the investigator seeks to answer. The secondary analyst, however, is bound by questions already asked, and data already collected and analyzed. To some extent, then, his analytical framework is predetermined. The framework employed in this report is composed of items which the author sought to include, and which had been included in prior research efforts (although not necessarily in exactly the same form). Further familiarity with the framework and its internal organization can be gained via a perusal of the table of contents, and the subsequent reading of the report proper.

(3) Analysis of Data. The analysis of data commanded the bulk of research energies, and required the greatest amount of time. Adherence to the pre-established, yet sufficiently flexible,[5] analytical framework was a constant objective.

Footnotes

1. Studies of attitudes toward nonpublic schools (Catholic included) are few and far between. While most officials within the nonpublic sector explicate the need for such research, the costs involved are often prohibitive. Of those studies which have been undertaken, many are sorely deficient in methodological sophistication and utilizable output. Frequently, quality has been sacrificed for expedience, or rendered unattainable for lack of sufficient funds.

2. Insofar as Catholic enrollment (elementary and secondary) represents approximately 83 percent of total nonpublic enrollment (elementary and secondary), the amount of distortion introduced by this delimitation was assumed to be minimal. See that section of the overall study pertaining to nonpublic school enrollment (Kenneth M. Brown. Enrollment in Nonpublic Schools, 55). Figures represent those available as of September, 1970. The congruity between Gallup (see Appendix A) and diocesan data is supportive of this assumption.

3. Relevant OER studies (Denver, Hillsborough County, Montgomery, St. Louis, and Savannah), of course, were already on file.

4. Abbreviated citations (geographic locations and page numbers) are employed in the text. For example, a reference to page 61 of Gregory M. Holtz, Robert F. Lovely, and Richard G. Kiekbusch. Catholic Education in St. Louis: An Attitudinal Study (Office for Educational Research, University of Notre Dame, 1970) would simply be entered (St. Louis, 61).

5. While the analysis was undertaken with a basic framework in mind, additional items were selectively incorporated as their inclusion in previous studies became known.

III. ANALYSIS

A. Demand: An Overview

Before undertaking a detailed analysis of any social phenomenon the researcher must acquire some initial impressions or insights into the subject matter at hand. However general and superficial they might be, such insights provide the analyst with a sense of direction, permit him to formulate hypotheses, and enable him to place his more minute findings in meaningful perspective. In a sense, the researcher must develop an awareness of the "lay of the land," a broadly based familiarity with the totality of that which he is to explore in depth. The ensuing paragraphs (section A), then, serve a sort of reconnaissance function.

What types of preliminary information might prove useful prior to embarkment upon a detailed assessment of the educational tastes and preferences of American Catholics? Insofar as the unit of analysis is "taste" or "preference," some general idea as to the nature and extent of lay receptiveness to Catholic schools is called for. How attractive are such schools to their actual and potential clientele (in lieu of available alternatives, e.g., public, independent, other religious, etc.)? Are they more appealing to high, middle, or low income Catholics? To urban, suburban, or rural parishioners? Are they appealing to anyone? In short, is there currently a demand for Catholic education in this country (volume), and if so, where does it lie (distribution)? Answers to these basic queries should provide the groundwork upon which a more in-depth analysis can be constructed (see sections B and C).

A word of caution regarding our use of the term "demand" is appropriate at this point. Herein, the term denotes a vague, somewhat undefined favorableness toward Catholic education among a specified group of respondents, and is not to be confused with "demand" as it is operationalized elsewhere in the overall report (in terms of enrollments, birth and baptismal rates, and other demographic variables). For our purposes, "demand" is descriptive of attitudes toward Catholic schools, an indicator of collective educational tastes and preferences. Thus, if a particular sample displays a high demand for parochial schools, it obviously contains a considerable number of individuals who positively evaluate such schools or who are openly receptive to them. Secondary analysis does not permit the development of instruments with which to measure key variables (i.e., attitudes indicative of educational tastes, preferences, and subsequent demand). One is forced to work with questionnaires already administered and responses already tabulated. Consequently, the assessments of demand discussed below were obtained via a perusal of responses to items which the authors deemed pertinent. The items were drawn from a heterogeneous pool of studies which differed from one another in every possible respect (see Appendix B). Needless to say, some were more equal to the task than others.

Volume. Some research efforts have treated the demand dimension only peripherally, while others have dealt with it at some length. Boise, Idaho respondents, for example, were simply asked whether or not Catholic schools were meeting the essential needs of the children of the diocese. Only 46.9 percent of those questioned responded in the affirmative, while 23.8 percent answered "no" and an additional 29.3 percent declined to comment (Boise, I-5). In other words, 53.1 percent of the Boise sample were less than satisfied with the performance of diocesan schools. In yet a more limited vein, Corpus Christi, Texas parishioners were asked if they would enroll their children in a Catholic high school should one be built.[1] Almost 60 percent indicated that they would, while an additional 11.2 percent responded in the affirmative but qualified their answers. Twenty-nine percent replied negatively or failed to respond (Corpus Christi, 16). Seventy-one (71) percent of the Corpus Christi sample, then, would at least consider enrolling their children in a Catholic high school if one were available.

Unlike lay respondents in Boise, those in Corpus Christi exhibited a considerable demand for Catholic education. Comparisons are risky, however, for while the Boise survey focused upon Catholic schools in general, the Corpus Christi research concerned itself only with those on the secondary level. In addition, Boise respondents were indicating their satisfaction (or dissatisfaction) with the current state of diocesan schools, while Corpus Christi Catholics indicated their readiness to utilize an institution not yet off the drawing boards. Hopefully, the vanguard of more extensive studies discussed below will lend themselves to more meaningful comparisons and interpretations.

Cronin, in her study of the attitudes of parents toward Catholic education in Lincoln, Nebraska, encountered a highly favorable overall response. Nearly 65 percent were of the opinion that Catholic parents are proud of diocesan school facilities (Lincoln, 55). When presented with the following statement: "Catholic elementary and secondary schools cost more than they are worth," only 25.6 percent of the sample concurred while 74.3 percent expressed disagreement (Lincoln, 98). In addition, 62.8 percent felt that the goal of increasing Catholic school enrollments was worth any sacrifice entailed, while only 37.2 percent felt differently (Lincoln, 98). The Catholic parents of Lincoln, then, appear to duplicate the enthusiasm for parochial schools apparent in Corpus Christi, but on a broader scale.

Studies in two Iowa cities substantiate the Lincoln findings and lend further credence to any preliminary hypotheses of high demand. Schiffgens, in analyzing the attitudes and perceptions of Catholic parents toward Catholic education in metropolitan Des Moines, found pervasive support for some sort of formal instructional format in matters of religion and morals, and an accompanying rejection of parental guidance as an entirely adequate alternative (Des Moines, 231). Furthermore, the means by which such instruction should be imparted, at least according to Des Moines Catholics, is apparently the conventional Catholic school. The latter responded overwhelmingly in the affirmative when queried as to the responsibility of all Catholics in supporting parochial elementary and secondary schools (Des Moines, 166). Even those parents who had withdrawn their children from diocesan schools evidently recognized some modicum of worth in such institutions (Des Moines, 166). Finally, the Des Moines data revealed considerable congruence between expectations as to the traits which should characterize the human output of Catholic schools, and perceptions as to what is in fact being accomplished by those schools insofar as student formation is concerned (Des Moines, 222). Apparently, Catholic parents in Des Moines want their offspring to receive formal training in matters of religion and morals, prefer that such training be dispensed within the confines of the conventional Catholic school, and are well pleased with results thus far obtained.

A second study, in Dubuque, exposed respondents to the following item: "The need for Christian education is as great today as it was in the past." Responding on a Likert-type instrument, 92.8 percent of the sample expressed agreement or strong agreement. Only 3.4 percent reacted negatively, while 4.0 percent withheld comment (Dubuque, Table 34).[2]

A recent study conducted in Pittsburgh was equally as encouraging. An item calling for an assessment of the quality of basic education available in the Catholic elementary school with which each respondent was most familiar elicited a modal response of + (Pittsburgh, 229).[3] Similar results were obtained when respondents were asked to evaluate Catholic secondary schools (Pittsburgh, 229). In fact, this affirmative thread (modal responses of + or ++ to statements laudatory of Catholic schools, and - or -- responses to critical assertions) ran throughout the entire report as parishioners commented upon specific aspects of Catholic education (Pittsburgh, 229-257).

Research in Marquette, Michigan,resembled that undertaken in Pittsburgh in that an attempt was made to assess separate demands for Catholic elementary and secondary education, as opposed to a singular demand for Catholic education per se. The Marquette study revealed a high overall acceptance of parochial elementary schools. All categories[4] of respondents except two exhibited percentages of at least 60 percent in favor of full-time attendance at such schools (instead of the deployment of available alternatives--e.g., public schools only, public schools supplemented by CCD, etc.). Thirteen of the twenty-eight categories contained between 70 and 80 percent of respondents in favor of full-time attendance, while another six displayed over 80 percent favorable responses. Exceptions to the rule were parents of public elementary and high school students (35 and 53 percents respectively). Of significance, however, was the fact that among Catholic parents who enroll their children in public secondary schools, a majority were in favor of full-time attendance at Catholic elementary schools (Marquette, 17).

Acceptance of Catholic high schools was somewhat less than that registered for parochial schools on the elementary level. Only the parents of students currently enrolled in the Catholic high school[5] were more than 70 percent in favor of full-time Catholic high school attendance. Five other categories (primarily less educated, lower income groups) featured favorable response percentages ranging from 60 to 70 percent. The remaining respondent groups all indicated "favorable" rates approximately 20 percent lower than corresponding rates pertinent to Catholic elementary education. Eleven categories exhibited percentages of less than 50 percent supportive of full-time attendance. Except for public school parents (elementary and secondary), however, only two groups displayed "favorable" rates of less than 44 percent (Marquette, 17). Thus, while not as overwhelming as lay support for Catholic elementary schools, acceptance of Catholic secondary education in Marquette appears to be reasonably widespread.

At this point, perhaps the most striking feature of this review is the variance and diversity characteristic of attitudes toward Catholic education. Lay Catholics in Lincoln, Pittsburgh, Des Moines, and

Dubuque exhibited overwhelming acceptance of, and support for, Catholic education on all levels. Boise respondents, on the other hand, displayed a great deal of skepticism. Marquette laymen were more discriminative, presenting a united front on behalf of Catholic elementary schools but remaining somewhat guarded in their endorsement of Catholic high schools. To the contrary, Corpus Christi parishioners indicate a considerable demand for Catholic secondary education. Quite probably, the source of the attitudinal variance noted above lies not in the attitudes themselves, but rather in the dissimilarity of the instruments used to measure them. What is needed are several batteries of studies in which similar or identical instruments are administered to comparable samples.

One group of studies presented respondents with the following statement: "Every Catholic child should spend some time in a Catholic school." Belleville, Illinois data revealed 79 percent of a sample of Catholic parents to be in agreement or strong agreement with only 11 percent responding negatively. Ten percent were undecided (Belleville, 16). Brickell's Rhode Island research found a solid majority replying favorably to the item (Rhode Island, 102). Finally, a study of three dioceses (Indianapolis, Indiana; Evansville, Indiana; and Louisville, Kentucky) by Elford revealed that 85 percent of the total sample was in agreement with the statement (Indianapolis, 35). A breakdown by diocese yielded the following (Indianapolis, 35):

Indianapolis - 83 percent
Evansville - 86 percent
Louisville - 85 percent

Belleville, Rhode Island, and Indianapolis responses to the above item, then, indicate a strong demand for Catholic education and are thus supportive of Lincoln, Pittsburgh, Des Moines, Dubuque, Marquette, and Corpus Christi findings.

Another group of studies simply asked respondents to list (not necessarily in order of preference) the two or three programs or services which they felt should receive the most support from the official church. Responses were then tabulated and programs were ranked in order according to the percentage of respondents who mentioned each. This method, when applied in Great Falls, Montana, yielded a diocesan list of priorities as follows (Great Falls, 31):

(1) Religious education programs for public grade and high school students (CCD);

(2) Catholic elementary schools;

(3) Adult religious education programs;

(4) Catholic high schools;

(5) Catholic colleges;

(6) Newman programs on secular college campuses.

Much like respondents in Marquette, Great Falls Catholics placed a higher price tag upon their parochial elementary schools than upon their high schools. In addition, the strong support registered for CCD programs implies an openness to religious education formats other than those revolving about the conventional Catholic school (e.g., public school attendance supplemented by CCD participation). The demand for adult programs may also be indicative of this readiness to innovate insofar as Great Falls parents might be expressing a willingness to acquire the competency requisite to providing adequate moral instruction for their children (perhaps as a supplement to, or even a replacement for current Catholic school or CCD programs). At any rate, the Great Falls data reveal a certain degree of skepticism (not unlike that exhibited in Boise) and an accompanying openness to innovation and reform.

Fall River, Massachusetts, respondents[6] (75 percent, 84 percent among Catholics only) felt it important for parents to "try to shape the religious beliefs of their children," but like their Des Moines counterparts, envisioned a need for exposure to a formal program of religious instruction as well (85 percent of Catholic respondents) (Fall River, 6).[7] What form should such a program take, however? Again, respondents were asked to list the 2 or 3 programs or services deserving of the most official support (Catholics only completed this portion of the study). The following list of priorities (with the percentage of respondents mentioning each included in parenthesis) was obtained

(Fall River, 7):

(1) Special education programs for the blind, deaf, retarded, etc. (55);

(2) religious education programs for young children (CCD) (46);

(3) Catholic elementary schools (34), and schools and religious education programs in ghetto neighborhoods (34);

(4) religious education programs for teenage children (CCD) (32);

(5) Catholic high schools (19).

Congruent with respondents in Marquette and Great Falls, those in Fall River valued their Catholic elementary schools more highly than their high schools. At each of these two levels, however, the CCD concept received more support than did the conventional Catholic school format. Apparently, the same readiness to innovate characteristic of Great Falls Catholics is present in abundance in the Diocese of Fall River. A certain social awareness or charitable concern for one's fellow man was also evident in the sample's selection of special education programs for the handicapped as the apostolic activity worthy of the most support. In similar fashion, schools and religious education programs for those in the ghetto were mentioned as frequently as the time-honored parochial elementary school. This humanitarian preoccupation, so consistent with the mandates of Vatican II, may be indicative of a de-emphasis of formal, ritualized religion, and a re-emphasis of the informal, interpersonal expression of one's faith. Within this context, lay preference for CCD programs as opposed to parochial schools is more easily understood. Again, the skepticism and innovative inclinations observed in Great Falls were also readily apparent in Fall River.

Donovan and Madaus, in their study of attitudes toward Catholic education in the Archdiocese of Boston, also asked respondents[8] to list the two or three apostolic activities or services which they deemed most worthy of official support. The following represents the list of priorities obtained via analysis of Catholic responses only (again, the percentage of respondents mentioning each is included in parenthesis) (Boston, 87):[9]

(1) Orphanages (46)

(2) Helping the jobless and the poor (36), and youth organizations (36)

(3) Religious education programs (CCD) (33)

(4) Catholic elementary schools (26)

(5) Hospitals (23), and family and marriage counseling (23)

(6) Foreign missions (17)

(7) Catholic colleges and universities (9)

(8) Nursing homes and other care programs (11)

(9) Catholic high schools (8)

The Boston data resemble the priorities established in Great Falls and Fall River to a great extent. Again, a higher price tag was placed upon Catholic grade schools than upon Catholic high schools (consistent with Marquette findings also). Religious education (CCD) programs were mentioned more frequently, however, than either of these more conventional alternatives. An overarching humanitarianism is also implicit in the Boston data (as indicated by the frequency with which orphanages, help for the jobless and the poor, hospitals, and other social service activities were mentioned). Much like the findings obtained in Great Falls and Fall River, then, those obtained in Boston revealed a greater perceived need for Catholic elementary schools than for Catholic high schools, a readiness to veer away from the conventional Catholic school altogether and utilize other alternatives (i.e., CCD and adult religious education programs), and an over-riding social awareness and implicit emphasis upon informal religion which partially explains the respondents' willingness to deviate from more formal instructional formats.

On the basis of studies reviewed thus far, a number of summary observations can be made. Apparently American Catholics recognize the role of the parent as a religious educator, but feel that some exposure to formal religious instruction is also necessary (Des Moines, Fall River). The specific context in which such instruction is to be dispensed, however, is a point of debate. Generally speaking, when respondents are administered a relatively simple questionnaire in which they are asked to indicate their acceptance of, or satisfaction with, Catholic schools, their replies are overwhelming in favor of such schools (Lincoln, Pittsburgh, Des Moines, Dubuque, Marquette, Corpus Christi, Belleville, Rhode Island, and Indianapolis). In other words when respondents are not asked to weigh the relative merits of the Catholic school against those of other educational alternatives or to rate the importance of such schools as opposed to other apostolic programs and services, but are merely requested to comment upon Catholic education per se, their responses tend to be highly favorable. Studies in which respondents have had to consider a variety of church-supported programs and then list the two or three worthy of the most backing have, however, yielded quite different results (Great Falls, Fall River, and Boston). In short, when subjects are forced to consider a situation in which X amount of official support is available, and are to determine which two or three of a host of programs are to receive the lion's share of that support, they become much more discriminatory. Conventional Catholic schools relinquish much of their prominence (secondary schools more so than elementary schools); and other programs and services, particularly those of a social service or welfare nature, assume greater importance. Religious education

(CCD) programs begin to loom as viable alternatives to conventional Catholic schools. In summary, American Catholics exhibit a reasonably strong demand for Catholic education, particularly at the elementary level. They also display a readiness to innovate and utilize instructional formats other than traditional parochial schools (e.g., CCD programs). This innovative flexibility appears to correspond with an explicit concern for the social inequities highlighted by Vatican II, and an implicit emphasis upon the informal and interpersonal aspects of the faith.

Given the fact that there does exist among American Catholics a varying demand for Catholic education, one might inquire as to the source of this demand. Why, in fact, do supporters of Catholic education wish to maintain their separate school system? Wherein does their appeal lie? Although these questions will be dealt with in greater detail in section B, a preliminary investigation should serve to augment our efforts to acquire some initial insights into the educational tastes and preferences of American Catholics.

A number of studies presented respondents with the following statement: "However hard it is to define, Catholic schools have a unique and desirable quality that is not found in public schools." The Belleville, Illinois, survey found 74 percent of respondents to be in agreement or strong agreement, while 10 percent replied negatively. Sixteen percent were undecided (Belleville, 10).

Brickell encountered 80 percent agreement in Rhode Island (Rhode Island, 102), while Elford's Indianapolis, Evansville, and Louisville respondents registered 84 percent in the affirmative (Indianapolis, 35). A breakdown by diocese yielded the following:

Indianapolis	84 percent
Evansville	80 percent
Louisville	86 percent

Research in Dubuque revealed 78.1 percent in agreement or strong agreement, 9.3 percent in disagreement or strong disagreement, and 12.9 percent undecided or withholding comment (Dubuque, Table 12). Apparently, supporters of Catholic education perceive something distinctive in it, something worth preserving.

A pair of studies conducted by the University of Notre Dame's Office for Educational Research represent attempts to elicit the same type of information (i.e., the degree to which Catholics recognize a certain distinctiveness in their schools). A different item was employed, however. Respondents were asked to reply to the following: "The differences between Catholic and public schools are no longer great enough to justify two separate school systems." In this case, a negative response was tantamount to acceptance or support of Catholic schools based upon their perceived distinctiveness. Hillsborough County, Florida, respondents were 79 percent in disagreement or strong disagreement and

15 percent in agreement or strong agreement (Hillsborough County, 85). St. Louis, Missouri, respondents followed suit, although not quite as emphatically. Only 57 percent expressed disagreement or strong disagreement, while 31 percent answered affirmatively (St. Louis, 25). Nevertheless, the perceived distinctiveness observable in Belleville, Rhode Island, Indianapolis, and Dubuque is also characteristic of Hillsborough County and St. Louis. Again, it becomes apparent that what demand there is for Catholic schools in lay circles is grounded, at least partially, in their perceived distinctiveness or uniqueness.

Other variables must be involved, however. What additional factors contribute to the demand for Catholic schools? Suspecting that "perceived quality" might, in some way, be a dimension of demand, Notre Dame researchers included the following item in three separate diocesan studies: "On the whole, Catholic schools are better than non-Catholic schools in my area of the city." The Hillsborough County response consisted of 71 percent in agreement or strong agreement and 15 percent in disagreement or strong disagreement (Hillsborough County, 84). St. Louis Catholics were considerably less enthusiastic. Only 43 percent of the St. Louis sample responded in the affirmative, while a nearly equal proportion, 37 percent, responded negatively (St. Louis, 22). A survey conducted in Montgomery, Alabama, yielded 49 percent in the "agree" or "strongly agree" categories and 25 percent in disagreement or strong disagreement (Montgomery, 125). Evidently, supporters of Catholic education feel that their schools are not only different, but also superior (the St. Louis data notwithstanding). Thus, perceived distinctiveness and perceived superior quality appear to be key factors generative of a demand for Catholic education. Again, each will be examined in-depth in section B.

At the outset of this section (A) two basic questions were posed. First, is there a demand for Catholic education in this country (volume)? Second, if such a demand exists, where does it lie (distribution)? Some preliminary speculation regarding volume now becomes possible:

(1) While Catholic laymen recognize the role of the parent as a religious educator (Des Moines, Fall River, and Indianapolis), they also explicate the need for exposure of the child to some formal religious instructional format (Des Moines, Fall River).

(2) The specific context within which such instruction is to be offered, however, is a source of debate.

(3) Generally, the conventional Catholic school receives a great deal of support. This support ranges from an overwhelming endorsement (Lincoln, Pittsburgh, Des Moines, Dubuque, Marquette, Corpus Christi, Belleville, Rhode

Island, and Indianapolis) to a somewhat guarded approval (Boise). The Catholic elementary school is the recipient of more widespread acceptance than is the Catholic secondary school (Marquette, Great Falls, Fall River, and Boston).[10] There is, then, a demand for Catholic education.

(4) This demand is based, at least in part, upon the perceived distinctiveness (Belleville, Rhode Island, Indianapolis, Dubuque, Hillsborough County, and St. Louis) and perceived superior quality (Hillsborough County, St. Louis, Montgomery) of Catholic schools. In other words, those who voice their support of such schools apparently feel that they are not only different from, but also better than, available alternatives.

(5) Catholic laymen also exhibit a readiness to innovate and utilize religious education programs other than those embodied in traditional parochial schools (e.g., public schools supplemented by CCD and/or parental guidance) (Great Falls, Fall River, and Boston). This openness to other than time-honored regimens is accompanied by an ameliorative concern with various social ills and the apparent adoption of a less ritualistic, more action-oriented brand of Catholicism (Great Falls, Fall River, and Boston). These innovative tastes and preferences are revealed in

> the course of in-depth questioning (whereas less intensive probing elicits more conventional responses of an almost spontaneous, pre-determined nature).

Demand for Catholic education, then, appears to be a much more complex phenomenon than might be expected.

Indicative of this complexity is the simultaneous presence, among American Catholics, of both a vigorous demand for parochial schools and an eagerness to utilize less conventional alternatives. How can this incompatibility be reconciled? As aforementioned, the variation in attitudes toward Catholic education is, in large part, a function of the dissimilarity of instruments used in measuring those attitudes. It is unlikely, however, that the total variance is attributable to this dissimilarity. Perhaps there are some genuine attitudinal differences among sub-samples. Perhaps attitudes toward parochial schools do vary systematically along socio-economic lines. In other words, an adequate understanding of the volume of demand for Catholic education requires a consideration of its distrubution. Thus we turn to the second basic question cited above.

Distribution. How does one go about analyzing the distribution of demand for Catholic education? A logical starting point would be the selection of a number of key social correlates (e.g., area of residence) and the subsequent analysis of the responses of sub-samples defined according to those correlates (e.g., the responses of urban Catholics, of suburban Catholics, etc.). The secondary analyst, however, is denied many of the luxuries accorded the primary researcher. His work is delimited by efforts which have preceded his own. In short, unless such correlates have already been selected and incorporated into previous studies, a treatment of the distribution of demand for Catholic education within the bounds of a secondary analysis (such as this) becomes impossible. Fortunately, a number of prior researchers have seen fit to perform these functions.

Several studies feature an analysis of replies by the respondents' areas of residence. Elford, for instance, presented his three-city sample with the following statement: "Every Catholic child should spend some time in a Catholic school." As noted above, an overall 85 percent in agreement, as well as affirmative response rates of 83, 86, and 85 percents respectively from the diocese of Indianapolis, Evansville, and Louisville, indicated a considerable demand for conventional Catholic education (Indianapolis, 35). A breakdown of affirmative responses by dioceses and types of locales within dioceses yielded the following (Indianapolis, 35):

Indianapolis

See city	84 percent
One parish town	84 percent
Rural (no school)	72 percent
Multi-parish town	85 percent

Evansville

See city	87 percent
One parish town	88 percent
Rural (no school)	67 percent
Multi-parish town	87 percent

Louisville

See city	87 percent
One parish town	84 percent
Rural (no school)	73 percent
Multi-parish town	85 percent

With the exception of those in rural areas, Elford's respondents exhibited a very strong endorsement of Catholic schools. Percentages for various types of areas closely resembled total and diocesan percentages. Apparently the demand for parochial schools, at least in that region surveyed by Elford, is equally as intense in urban, semi-urban, and semi-rural locales. The rural demand, while not weak in any sense, was considerably less than that displayed in more populous areas. This particular statistic may well be a function of the inaccessibility of Catholic schools in rural areas rather than a valid indicator of non-acceptance (and will be discussed further in Section C when "use of Catholic schools" is considered as a social correlate). At this point, then, there appears to be no significant relationship between demand for Catholic education and area of residence.

Elford also attempted to tap his respondents' perceptions of the Catholic school as a unique educational vehicle via exposing them to the following assertion: "However hard it is to define, Catholic schools have a unique and desirable quality that is not found in public schools." Again, as noted earlier, respondents displayed extraordinarily high rates of agreement (a total mean of 84 percent, and diocesan means of 84, 80, and 86 percents respectively for Indianapolis, Evansville, and Louisville) (Indianapolis, 35). A breakdown by diocese and area of residence yielded the following (Indianapolis, 35):

Indianapolis	
See city	85 percent
One parish town	85 percent
Rural (no school)	76 percent
Multi-parish town	85 percent
Evansville	
See city	81 percent
One parish town	80 percent
Rural (no school)	72 percent
Multi-parish town	79 percent
Louisville	
See city	87 percent
One parish town	82 percent
Rural (no school)	74 percent
Multi-parish town	82 percent

The distribution of responses to this item is nearly identical to the previous distribution. Once more a strong demand characterized all categories, rural respondents being somewhat less assertive in their affirmation. The Elford data, then, continue to indicate no significant relationship between demand for Catholic education and area of residence.

Responses to two demand items--one a general statement concerning demand per se, the other a more specific item designed to measure demand based upon perceived distinctiveness--serve as the basis for this conclusion.

Notre Dame research in St. Louis qualifies the Indianapolis findings to some extent. Respondents were presented with the following statement: "The differences between Catholic and public schools are no longer great enough to justify two separate school systems." A sparse 57 percent in disagreement indicated only a mild demand (based upon perceived distinctiveness) for Catholic schools in the Archdiocese of St. Louis (St. Louis, 25). Internal analysis yielded the following percentagized breakdown by area of residence:

	Disagree or Strongly Disagree	Agree or Strongly Agree
Urban	62	25
Suburban	55	35
Rural	56	29

Apparently, the lack of enthusiasm evident in the overall response rate is characteristic of each residence category as well. The volume of demand differs from that revealed in the Indianapolis research (Indianapolis, Evansville, and Louisville respondents were highly supportive of parochial schools; St. Louis Catholics were much more subdued in their expression of demand), but the distribution configurations are very similar. In short, the St. Louis data, much like that collected by Elford, indicate no significant relationship between demand based upon perceived distinctiveness and area of residence.

Notre Dame efforts to assess demand based upon perceived comparative quality revealed quite a different response pattern. Respondents in St. Louis were confornted with the following statement: "On the whole, Catholic schools are better than non-Catholic schools in my area of the city." An overall affirmative response rate of 43 percent, and a corresponding negative rate of 37 percent (with 20 percent undecided), indicate a very limited demand for Catholic schools based upon their perceived superior quality. Indeed, these figures are less encouraging than those indicative of demand based upon perceived distinctiveness. A breakdown by area of residence, however, yielded the following:

	Disagree or Strongly Disagree	Agree or Strongly Agree
Urban	63	19
Suburban	37	31
Rural	49	28

Evidently, marginal totals (volume) have masked certain significant response patterns (distribution) uncoverable only via internal analysis. It is obvious, for example, that while suburban Catholics registered a waning "quality" demand for parochial schools, and rural parishioners occupied a sort of middle ground, urban respondents expressed a relatively strong demand for Catholic education. These distinct, residence-specific demand quotients had, in fact, canceled out one another in the overall response rates. Insofar as perceived superior quality is concerned, then, St. Louis data indicate that the demand for parochial schools decreases as one moves from city to suburb, and increases slightly as one takes in rural areas. Demand, at least on a quality basis, does appear to vary with area of residence.

A summary statement based upon such scanty evidence becomes a risky undertaking. Let it suffice to say that the relationship between demand for Catholic education and area of residence is at best a vague parameter begging for additional investigation. It appears, however, that respondents, when asked for impressionistic evaluations of Catholic schools (e.g., whether or not every child should attend one), tend to render very favorable ones regardless of where they live (Indianapolis). Likewise, the recognition of some distinctive or unique offering of the parochial school seems to cut across residential boundaries (Indianapolis, St. Louis). Some variation does exist, however, with respect to assessments of the quality of these initially impressive, unique educational units (St. Louis). In other words, to be attractive at first glance and essentially different is not necessarily equivalent to being good.

Generally, urban Catholics evaluate their schools more favorably than do Catholics in suburban areas. Rural respondents fall somewhere in between. The geographic variation may be due in part to the presence of modern public school plants in more exclusive (suburban) neighborhoods, and the glaring inferiority of public schools in less attractive (urban) zones. The former tend to be superior to adjacent parochial schools, while the undesirability of the latter may serve to reinforce the drawing power of Catholic schools in the inner city. Indeed, the very phrasing of the St. Louis "quality" item (in which respondents were asked to make a qualitative comparison of public and parochial schools) lends support to this contention. Perhaps the introduction of additional correlates will help to clarify the vagueries above.

In a number of studies "income" has been controlled for in the analysis of data. Dubuque respondents, for example, were presented with this general statement: "The need for Christian education is as great today as it was in the past." An overall affirmative response rate of 92.8 percent, indicated a very emphatic demand for Catholic schools (Dubuque, Table 34). A percentagized breakdown by income levels yielded the following (Dubuque, Table 34):

	Agree or Strongly Agree	Disagree or Strongly Disagree
Less than $3,000	89.7	3.2
$3,000 - $5,999	92.1	4.4
$6,000 - $8,999	94.4	2.9
$9,000 - $14,999	92.8	4.0
$15,000 - $24,999	93.7	2.9
$25,000 cr over	91.4	5.4

Apparently, the emphatic demand denoted in the overall response rate is characteristic of individual income levels as well. No significant variations in demand, by income, were evident as Dubuque Catholics reacted to the above item.

The Dubuque sample was also asked to respond to the following statement: "However hard it is to define, Catholic schools have a unique and desirable quality that is not found in public schools." This item is identical to that employed by Elford in Indianapolis,[11] and was obviously intended to assess the demand for parochial schools grounded in their perceived distinctiveness. In this case, 78.1 percent of the sample responded in the affirmative while 9.3 percent expressed negative sentiments (Dubuque, Table 12). Again, the demand for Catholic education--this time based upon its allegedly unique offerings--was considerable. A breakdown by income level revealed the following percentages (Dubuque, Table 12):

	Agree or Strongly Agree	Disagree or Strongly Disagree
Less than $3,000	79.0	7.3
$3,000 - $5,999	76.4	10.1
$6,000 - $8,999	76.0	9.5
$9,000 - $14,999	77.3	10.7
$15,000 - $24,999	75.1	12.4
$25,000 or over	76.4	13.3

Again, no significant differences in demand for Catholic education were revealed when income was held constant. The recognition of distinctiveness (of parochial schools) characteristic of the total sample was observed in all income groups as well. The volume of agreement with this item was somewhat less than that registered for the previous statement, but the relative distribution of responses was nearly identical. On the basis of Dubuque findings, then, one must conclude that no significant relationship exists between demand for Catholic schools and income when the former is defined in general or "perceived distinctiveness" terms.

Notre Dame research in St. Louis and Hillsborough County lends support to the Dubuque data on perceptions of distinctiveness among various income groups. Respondents in these two studies were confronted with the following: "The differences between Catholic and public schools are no longer great enough to justify 2 separate school systems." As noted earlier, St. Louis Catholics registered a rather subdued acknowledgment of the uniqueness of parochial schools. Only 57 percent disagreed or strongly disagreed with the statement while 31 percent concurred (St. Louis, 27). Hillsborough County respondents were much more assertive in their recognition of the unique offerings of Catholic education. Seventy-nine (79) percent objected while only 15 percent responded affirmatively. Percentagized breakdowns of these overall response rates by income level revealed the following. In St. Louis (St. Louis, 27):

	Disagree or Strongly Disagree	Agree or Strongly Agree
Less than $3,000	58	23
$3,000 - $4,999	63	23
$5,000 - $6,999	60	29
$7,000 - $8,999	57	31
$9,000 - $11,999	59	32
$12,000 - $14,999	60	30
$15,000 - $24,999	54	38
$25,000 or over	57	37

In Hillsborough County (Hillsborough County, 85):

	Disagree or Strongly Disagree	Agree or Strongly Agree
Less than $3,000	69	24
$3,000 - $4,999	85	8
$5,000 - $6,999	77	12
$7,000 - $8,999	78	15
$9,000 - $11,999	81	14
$12,000 - $14,999	77	18
$15,000 - $24,999	91	16
$25,000 or over	91	9

In each study, the recognition of Catholic school distinctiveness evident in total response rates proved to be pervasive. In St. Louis and Hillsborough County, then, just as in Dubuque, no significant relationship between demand based upon perceived distinctiveness and income level was apparent. All groups, no matter how affluent, tended to recognize something unique being dispensed within the confines of parochial schools.

Efforts to assess differentials in "quality"-based demand among various income groups, however, resulted in findings similar to those obtained when area of residence was the correlate under study. Significant variations were found to exist. St. Louis, Hillsborough County, and Montgomery respondents, for instance, were presented with this statement: "On the whole, Catholic schools are better than non-Catholic schools in my area of the city." Affirmative response rates for the 3 samples were 43, 71, and 49 percents respectively (St. Louis, 24; Hillsborough County, 84; and Montgomery, 125). Thus, both St. Louis and Montgomery Catholics displayed a mild overall demand based upon perceived superior quality (in each case the proportion of responses in agreement, while not overwhelming, did out-weigh the percentage of negative responses), while those in Hillsborough County were much more emphatic in their affirmation of the above item. Percentagized breakdowns of the above, however, by income level revealed the following. In St. Louis (St. Louis, 24):

	Agree or Strongly Agree	Disagree or Strongly Disagree
Less than $3,000	50	17
$3,000 - $4,999	60	24
$5,000 - $6,999	47	31
$7,000 - $8,999	44	38
$9,000 - $11,999	41	40
$12,000 - $14,999	46	38
$15,000 - $24,999	35	35
$25,000 or over	32	55

In Hillsborough County (Hillsborough County, 84):

	Agree or Strongly Agree	Disagree or Strongly Disagree
Less than $3,000	73	9
$3,000 - $4,999	71	11
$5,000 - $6,999	67	10
$7,000 - $8,999	72	14
$9,000 - $11,999	70	17
$12,000 - $14,999	75	17
$15,000 - $24,999	73	16
$25,000 or over	69	14

In Montgomery (Montgomery, 125):

	Agree or Strongly Agree	Disagree or Strongly Disagree
Less than $3,000	70	11
$3,000 - $4,999	62	13
$5,000 - $6,999	64	17
$7,000 - $8,999	55	25
$9,000 - $11,999	42	29
$12,000 - $14,999	42	31
$15,000 - $24,999	42	28
$25,000 or over	8	50

Only in Hillsborough County, where all respondents seem to perceive Catholic schools as superior to their counterparts in the public sector, are no significant variations discernible.[12] In both St. Louis and Montgomery demand for Catholic schools based upon their perceived superior quality tends to vary inversely with income level. That is, as one moves up the socio-economic ladder affirmative responses become less frequent while negative responses increase. Again, the comparative quality of adjacent public schools is a critical factor. These differentials greatly resemble those obtained earlier when area of residence was held constant. In fact, insofar as income and area of residence tend to vary together (median income tends to vary directly with distance from the central city, rural areas excluded[13]), one might hypothesize that suburban (urban) and middle to high (low) income respondents are one and the same. Thus, "demand by income" findings serve to substantiate the "demand by residence" data presented earlier.

In conclusion,[14] when respondents are asked for a spontaneous, impressionistic appraisal of Catholic schools they tend to render a favorable one, regardless of where they live or how much money they earn (Indianapolis, Dubuque). Perceptions of the parochial school as a distinctive or different type of educational facility are equally as pervasive. Respondents from all residential areas and all income brackets seem to recognize some unique offering of these schools (Indianapolis, Dubuque, St. Louis, Hillsborough County). When pressed to make a qualitative comparison between public and parochial schools, however, respondents differ significantly in their assessments. Wealthier Catholics residing in outlying suburbs evaluate parochial schools much less favorably than do their less affluent, urban cohorts. (St. Louis, Montgomery). One possible explanation for this variation is the presence of modern, well staffed public schools in suburban areas (thus detracting from the drawing power of nearby Catholic schools) and the corresponding absence of such facilities in the inner city (thus augmenting the attractiveness of Catholic schools there). The phrasing of the "quality" item employed in St. Louis, Hillsborough County, and Montgomery (requiring respondents to make a direct qualitative comparison of public and parochial schools) lends credence to this contention.

Summary. A discussion of the volume and distribution of the demand for Catholic education in this country indicates that:

(1) American Catholics, while recognizing the role of the parent as a religious educator, do want their children to receive some formal religious training as well.

(2) Lay opinion varies as to the context within which such training should be dispensed.

(3) While conventional parochial schools receive a good deal of support, Catholic laymen also display a willingness to utilize other available alternatives (e.g., public school attendance supplemented by CCD instruction).

(4) This openness to other-than-traditional formats is especially evident among high income, suburban Catholics whose appraisal of the quality of parochial schools (relative to other options) is consistently less favorable than that of their middle and lower income, urban counterparts. The presence of modern, well staffed public schools in suburban areas

appears to be largely responsible for this differential assessment.

(5) All Catholics, regardless of area of residence or income, seem to recognize some unique offering of Catholic schools.

In short, while there does exist a blanket demand for Catholic education in the United States (volume), internal variations in this demand are evident (distribution). Hopefully, section B will furnish further insights into these variations.

B. Demand: Determinants

The foregoing discussion indicated that while nearly all Catholics recognize some unique offering of parochial schools (demand based upon perceived distinctiveness), they differ in their assessments of the excellence of those schools (demand based upon perceived comparative quality.) Evidently, to be different is not necessarily equivalent to being good. To be identifiable as a bona fide Catholic school is not always tantamount to qualifying as a first-rate educational plant per se. Variations in quality assessment are particularly evident when respondents are asked to compare public and parochial schools in their immediate vicinity. Generally, Catholics in high income, suburban areas evaluate parochial schools less favorably than their middle or low income, urban counterparts. One apparent reason for this discrepancy is the presence of modern public schools in the urban fringe (thus reducing the drawing power of Catholic schools there), and the corresponding inadequacy of many inner city public schools (thus magnifying the attractiveness of parochial schools in these areas.) In other words, the demand for Catholic schools is frequently a function of the state of adjacent public schools.

This section consists of an elaboration of the above, a discussion of the determinants of the response patterns portrayed in section A. An attempt will be made to answer two overarching questions:

(1) What is seen as unique about Catholic schools?

and

(2) What are the criteria upon which assessments of educational excellence are based?

The first of these questions deals with the perceived distinctiveness of parochial schools, while the second involves their perceived quality. In short, what factors underlie the pervasiveness of the former, and the variation in the latter?

Distinctiveness. A thorough understanding of the perceived distinctiveness of Catholic education requires a knowledge of those traits which are seen as contributive to that distinctiveness. What educational offerings do American Catholics regard as peculiar to parochial schools? According to respondents, what are the unique ingredients of such schools? A number of strategies have been employed in attempts to supply answers to these perplexing questions. All consist, essentially, of the elicitation of direct comparisons of parochial and public schools on selected items.

Notre Dame researchers, for example, presented Denver and Savannah respondents[15] with a list of 36 items, each of which dealt with the proficiency of schools in performing certain educational functions (e. g., "Catholic/Public schools are more likely to train children for college.") They were then asked to indicate which type of school--Catholic or public--was more effective on each item, to submit their judgments as to the relative success enjoyed by parochial and public schools in a number of areas. For analytical purposes the 36 items were grouped into 6 categories, each of which represented a separate dimension of total school programming: religious, academic, social, personal, school operation, and practical.[16]

Denver responses (in percentages) were distributed as follows (Denver, 131):

Category	School Child Attends	Parents Favor Catholic School	Parents Favor Public School	Neutral
Religious	Catholic	97.3	0.0	2.7
	Public	92.5	0.6	6.9
Academic	Catholic	50.6	26.3	22.8
	Public	15.4	58.6	25.9
Social	Catholic	86.0	2.7	11.4
	Public	47.5	20.4	32.1
Personal	Catholic	85.7	1.7	12.6
	Public	46.3	17.9	35.8
School operation	Catholic	19.5	53.0	27.4
	Public	3.1	84.2	11.7
Practical	Catholic	29.9	20.3	49.8
	Public	9.9	53.1	37.0

Religious items referred to such activities as teaching children about God, training them to practice their religion, providing students with Catholic friends and a good example, and the fostering of religious vocations. There were no significant differences in the responses of Catholic and public school parents to these items. Both groups recognized the superiority of parochial schools in this performance area. In fact, constitutional limitations upon public school functioning in the area of religious instruction make such a comparison appear somewhat ludicrous. Nevertheless, the overwhelming endorsement of Catholic schools as superior in this particular specialty (97.3 percent of Catholic school parents, 92.5 percent of public school parents) indicates that one distinguishing feature of these schools is their ability to offer a morally-based, value-oriented curriculum.

Items classified as "academic" dealt with the quality of education in the basic verbal and quantitative skill areas (e. g., reading, arithmetic), as well as in the humanities, the sciences, and the arts. Parents of Catholic school students tended to rate the academic offerings of Catholic schools as superior, while public school parents lent their support to schools in the public sector. The latter, however, were slightly more assertive in voicing their preference. Only 50.6 percent of Catholic school parents perceived Catholic schools as academically superior, while a nearly equivalent 49.1 percent cited public school superiority or noted no difference. Public school parents, on the other hand, were 58.6 percent in favor of public schools, and only 41.3 percent in favor of Catholic schools or aware of no difference. The high correlation between the type of school (Catholic or public) to which parents impute academic superiority and the type of school in which their children are enrolled suggests that assessments of academic offerings may be determined by patronization.

That is, the imputation of academic superiority may be a consequence of, rather than a determinant of, parental decisions regarding enrollment (i. e., parents tend to view the schools which their children attend as "better.") This cause and effect relationship will be further discussed in section C when "use" is considered as a correlate of attitudes toward Catholic schools.[17] Academic items, then, do not appear to be important as factors distinguishing parochial from public schools. Although Denver parents perceive public schools as slightly better academically, other traits appear to be more prominent for purposes of differentiation.

Social items were those pertaining to the inculcation of a basic social consciousness, the development in the child of an awareness of his place within the social structure and his obligations to others residing alongside him (e.g., Catholic/Public schools make children good citizens of the United States, teach children to like other races and nationalities, train children in respect for persons and property.) Denver Catholic schools fared far better than their public counterparts on this dimension. Eighty-six (86) percent of Catholic school parents and 47.5 percent of public school parents explicated the superiority of parochial schools in transmitting a sense of one's place in the total scheme of things. Only 2.7 percent of the parents of Catholic school students and 20.4 percent of their public school cohorts favored public schools in this particular facet of formal education. The capability of Catholic education, then, to equip those exposed to it with a relevant social perspective and a humanitarian concern for others appears to be yet another mark of its distinctiveness--at least according to Denver respondents.[18]

Personal items referred to the instillment of certain character virtues (e.g., self-discipline and hard work, honesty, independent thinking.) The distribution of responses was nearly identical to that obtained in the "social" category. An overwhelming 85.7 percent of Catholic school parents and 46.3 percent of public school parents felt parochial schools were more adept at imparting such character traits, while only 1.7 percent of the former and 17.9 percent of the latter viewed public schools as superior in this area of functioning. Thus, the cultivation of personal virtues appears to be another frequently perceived characteristic of Catholic schools in Denver.

The "school operation" category consisted of items relating to adequacy of facilities, size of classes, extensiveness of program offerings, quality of teachers, etc. Public schools were favored over Catholic schools on these items. Only 19.5 percent of parochial school parents and 3.1 percent of public school parents assessed Catholic schools as superior insofar as school operation was concerned, while 53.0 percent and 84.2 percent of Catholic and public school parents respectively thought public schools were more satisfactory in this area. One particularly revealing item from the "school operation" category sought respondents' judgments as to the relative quality and effectiveness of parochial and public school teachers. Sixty (60) percent of Catholic school parents and 83 percent of public school parents felt that the teaching was superior in the public sector. Apparently, Denver laymen are impressed with the organizational make-up and operational efficiency characteristic of their local public schools.

Practical items pertained to matters of convenience, finance, and subsequent job opportunities (e.g., Catholic/Public schools are more conveniently located and are more likely to provide transportation for school children, are not expensive for Catholic parents, train children for good jobs when they grow up.) Among Catholic school parents, 29.9 percent favored parochial schools on practical items, while 20.3 percent favored public schools. Parents of public school students were 9.9 percent supportive of Catholic schools and 53.1 percent in favor of public institutions. Of particular significance is the high degree of neutrality running through responses to items in the "practical" category. Only 50.2 percent of the Catholic school parent sub-sample registered a preference for either Catholic or public schools, while 49.8 percent declined to choose one over the other. Among public school parents, 63.0 percent expressed a preference, while 37.0 percent remained neutral. Insofar as neutrality betrays indifference or absence of impact, it might be concluded that practicality is a distinguishing feature of neither parochial nor public schools in Denver. Among those who did indicate a preference, however, the majority leaned toward schools in the public sector. A more accurate conclusion might be that although practicality is not an overbearing differentiator (between Catholic and public schools), it is more often perceived as a property of public, rather than Catholic, education.

Denver respondents, then, perceived Catholic schools as distinctive in the following functional areas:

(1) Religious instruction

(2) Development of social awareness and a sense of responsibility

(3) Nurturance of desirable character traits

Moreover, they were able to identify areas in which they felt public schools excelled:

(1) Academic offerings

(2) Organizational format and operational efficiency

(3) Practicality and convenience

The perceived uniqueness of Denver's Catholic schools appears to lie in their emphasis upon the personal-moral development of the child. Public schools, on the other hand, feature a strong academic-vocational underpinning. Parochial education was perceived as pupil-oriented (i.e., immersing the student in a value-laden regimen of instruction and engendering within him an awareness of his responsibilities toward self and others.) Public education was looked upon as program-oriented (i.e., providing the tax-paying public with a well-staffed, efficiently administered program of academic and extra-curricular offerings.) To be sure, some overlap does exist (e.g., not all respondents judged the personal character training dispensed in parochial schools as sounder than that received in the public sector; a considerable percentage thought Catholic schools were academically superior.) The preceding, however, represent the major strains in the Denver sample's perceptions of parochial and public schools.

Of additional significance was the difference in intensity between response patterns favorable to parochial school efficacy and those affirming the effectiveness of public schools. The former were characterized by considerable unanimity (e.g., the overwhelming recognition of Catholic school superiority in the area of religious instruction, the strong support for Catholic school ascendancy in the development of personal and social virtues), whereas the latter featured less overall consensus (e.g., the very moderate attribution of academic superiority to schools in the public sector, the neutrality accompanying recognition of the greater convenience of public schools.) In those areas in which Denver parochial schools were deemed superior, the imputation of superiority tended to be clear-cut. Contrarily, assertions of public school ascendancy in selected functional areas were generally more guarded.

Savannah research corroborated Notre Dame findings in Denver. Respondents perceived Catholic schools as more proficient in the areas of moral, social, and personal development, while academic, school operation, and practical items generally elicited responses supportive of public school ascendancy. In addition, the differential imputation of superiority so evident in Denver (i.e., the unchallenged primacy of parochial education in some functional areas, the questionable superiority of public education in others) was perhaps even more clearly demonstrated in Savannah. A listing of those proficiency items which were answered either "Catholic" or "Public" by 70 to 90 percent of all respondents, together with the functional category from which each was drawn (in parentheses) is self-explanatory (Savannah, 152-154):

(1) Catholic schools are more likely to teach children to practice their religion. (Religious)

(2) Catholic schools are more likely to teach children about God, Christ, and religion. (Religious)

(3) Catholic schools are more likely to allow time for prayer in the course of the day. (Religious)

(4) Catholic schools are more likely to teach children to read and write clearly and well. (Academic)

(5) Catholic schools are more likely to make children good citizens of the United States. (Social)

(6) Catholic schools are more likely to provide children with close friends and good example. (Social)

(7) Catholic schools are more likely to encourage children to accept people of different races and nationalities. (Social)

(8) Catholic schools are more likely to teach children to get along with other people. (Social)

(9) Catholic schools are more likely to teach children to help others. (Social)

(10) Catholic schools are more likely to foster tolerance of different religious beliefs. (Social)

(11) Catholic schools are more likely to train children to be honest, truthful, and moral. (Personal)

(12) Catholic schools are more likely to discipline children to respect authority. (Personal)

(13) Catholic schools are more likely to train children in self-discipline and hard work. (Personal)

(14) Public schools are more likely to offer vocational education courses for those children who are interested. (School operation)

(15) Catholic schools have more adequate classroom space. (School operation)

(16) Catholic schools are more likely to prepare children for college. (Practical)

Quite obviously, Savannah parents imputed superiority to Catholic schools in the same functional areas as did Denver respondents (of the 15 items which elicited a 70-90 percent affirmative response favorable to Catholic schools, 12 were either religious, social, or personal in nature.) And once again, they did so rather emphatically (again, note the number of items favorable to parochial schools receiving 70-90 percent affirmation.) On the other hand, while Savannah respondents recognized public school superiority in the 3 remaining functional categories (academic, school operation, and practical) (Savannah, 156-157), they were much less assertive in this recognition (of the sixteen "70-90 percent response" items listed above, only one elicited a response pattern favorable to schools in the public sector.) In short, Savannah data represents a replication of findings obtained in Denver pertinent to the perceived distinctiveness of Catholic (and public) schools.

Other research efforts have tended to validate Notre Dame findings in Denver and Savannah. Respondents[19] in Fall River, for instance, were given a list of 13 items, each representing a different aspect of school functioning, and were asked to indicate which schools--Catholic or public--were more adroit on each. Their response, along with a Notre Dame-type categorization of each item,[20] was as follows (Fall River, 9):

Catholic schools do a better job:

(1) Classroom discipline (Personal)

(2) Teaching children right from wrong (Religious)

(3) Preparation for marriage and family life (Social)

(4) Guidance and counseling services (Social)

Public schools do a better job:

(1) Preparation for a job (Practical)

(2) Offering a wide range of courses (School operation)

Disagreement (Catholics say Catholic schools do a better job/ non-Catholics say public schools do a better job):

(1) Developing good citizenship (Social)

(2) Developing sympathy for the problems and views of Negroes (Social)

(3) Preparation for college (School operation)

(4) Teaching students to think for themselves (Personal)

(5) Physical condition of buildings (School operation)

(6) Teaching children to get along with others (Social)

(7) Having high quality teachers (School operation)

Consistent with respondents in Denver and Savannah, those in Fall River perceived Catholic schools as superior on religious, social, and personal items. Public schools, on the other hand, were recognized for their proficiency in practical and school operation-related areas. The paucity of items (only 13 altogether), however, places any inferences in questionable light (e.g., inferring that public schools are perceived as superior in the area of school operation on the basis of responses to one related item; in fact, responses were split on the 3 remaining school operation items.) Indeed, many key dimensions of school programming went unmentioned (e.g., the absence of any items of an academic nature.) In addition, insofar as percentages of respondents supportive of parochial and public schools on various items were not given, conclusions regarding response strength or intensity cannot be reached (i.e. , Was the imputation of Catholic school superiority on religious, social, and personal items more or less definitive than the imputation of public school primacy on practical and school operation items?) Finally, the fact that over half (7 of 13) of the items elicited a split response (Catholics favoring Catholic schools/ non-Catholics favoring public schools) only magnifies the above shortcomings. Fall River data, then, at best lend weak support to findings unearthed in Denver and Savannah, and at worst do not contradict those findings.

Catholics in Belleville were administered a similar instrument and responded in much the same fashion as the Fall River sample. Results obtained, along with response percentages and appropriate Notre Dame categorization in separate parentheses, are seen below (Belleville, 23-24):

> Areas in which Catholic schools are considered to be better than public schools:
>
> (1) Teaching honesty and truthfulness (52) (Personal)
>
> (2) Preparation for marriage and family life (58) (Social)
>
> (3) Developing respect for persons and property (55) (Social)
>
> (4) Teaching self-discipline (57) (Personal)

Areas in which public schools are considered to be better than Catholic schools:

(1) Physical education programs (47) (School operation)

(2) Provision for slow learners (42) (School operation)

Areas in which Catholic schools and public schools are considered to be about equal:

(1) Developing good citizenship (58) (Social)

(2) Developing an interest and eagerness for learning (54) (Academic)

(3) Developing creativity and imagination (50) (Academic)

(4) Preparation for college (42) (School operation)

(5) Preparation for a job (49) (Practical)

(6) Teaching students to think for themselves (55) (Personal)

(7) Developing a love of books (61) (Academic)

Again, Catholic schools were perceived as superior on social and personal items (oddly enough, no religious items were included), while public schools were considered to be more proficient in the area of school operation (all academic and practical items elicited split responses.) The same deficiencies which hindered the drawing of inferences in Fall River (i.e., the scarcity of items, the omission of some important dimensions of school programming, the abundance of items eliciting split responses), however, continued to be prohibitive in Belleville. The insertion of percentaged response rates, however, does permit the drawing of conclusions relevant to response strength. As in Denver and Savannah, imputations of Catholic school superiority appeared to be somewhat more intense than attributions of public school primacy. While support for parochial school functioning on social and personal items ranged from 52 to 58 percent, percentages affirming superior public school performance in the area of school operation hovered around the mid-40's. The Belleville study, then, much like the Fall River research, is supportive--within limits--of Denver and Savannah data on the perceived distinctiveness of parochial and public education.

Cronin, while not addressing herself to the "perceived distinctiveness" issue directly, did expose her Lincoln respondents to several statements relevant to that issue. Their percentagized responses, along with appropriate Notre Dame classification, were as follows (Lincoln, 36, 40, 42, 45):

	Agree	Disagree
(1) Catholic school instruction is below the average of public school instruction. (School operation)	26.5	73.5
(2) Catholic school teachers are not as well prepared as public school teachers. (School operation)	24.4	75.6
(3) Catholic school graduates have more difficulty making business and social contacts. (Practical)	20.4	79.6

	Agree	Disagree
(4) Moral and spiritual values are more consistently taught in Catholic schools. (Religious)	90.8	9.2
(5) Catholic schools fail students not college bound. (School operation)	49.5	50.4
(6) Catholic schools present a more balanced program of fundamental subjects. (School operation)	21.5	78.5

It is readily evident that Lincoln parents concurred with respondents in Denver, Savannah, and Fall River regarding the parochial school's role as an agency of religious-moral instruction (90.8 percent attested to Catholic school superiority in this area of functioning via responding to item 4.) Cronin's respondents differed with those in Denver, Savannah, and Fall River, however, in their assessment of parochial schools as vehicles of job preparation (79.6 percent objected to the negative assertion in item 3.) Like respondents in Belleville, they tended to view Catholic school graduates as competing on at least equal footing with public school products in the race for coveted jobs. With respect to school operation items, Lincoln Catholics disagreed with Denver and Savannah respondents in evaluating Catholic school instruction and instructors as at least as good as that which is to be found in the public sector (73.5 percent and 75.6 percent in disagreement on items 1 and 2 respectively.) They agreed with respondents in Denver, Savannah, Fall River, and Belleville, however, in affirming the broader range of academic programs available in public schools (78.5 percent in disagreement on item 6, and a near 50-50 response to item 5.) Apparently, the Lincoln sample was critical not of the personnel of parochial schools, but rather of the narrowly conceived programs with which they were encumbered. Cronin's data, then, are perhaps most valuable as a cautionary device, as a forewarning against an overly rigid and simplistic interpretation of the religious-social-personal/academic-school operation-practical dichotomy developed thus far (e.g., not all respondents feel public schools offer superior job preparation, not all respondents attest to the inferiority of Catholic school teachers.) Perceptions of educational distinctiveness appear to be rather complicated socio-psychological phenomena, demanding very careful investigation.[21]

Elford's study of Indianapolis, Evansville, and Louisville respresents an attempt at such investigation. Respondents in the 3 dioceses were shown a list of 16 items, each representative of a different aspect of school functioning, and asked to indicate which type of school--Catholic or public--was more proficient in each case. Respondents also had the option of indicating Catholic school/public school equality on each item. Responses were displayed in the form of two tables. One was labeled "Catholic School Assets" and contained the percentagized distributions of responses to those items for which the proportion of respondents imputing Catholic school superiority exceeded the proportion attributing primacy to public schools. Another table entitled "Public School Assets" contained similar information for those items eliciting a majority of respondents supportive of public education.

The two tables (with Notre Dame categorization added) are reprinted below (Indianapolis, 38,44):[22]

Catholic School Assets

		Catholic	Public	No Difference
(1)	Preparation for marriage and family life (Social)	64	5	31
(2)	Teaching of self-discipline (Personal)	64	3	33
(3)	Developing respect for persons and property (Social)	60	2	38
(4)	Teaching honesty and truthfulness (Personal)	58	2	40
(5)	Developing proper attitudes toward social problems (Social)	40	6	54
(6)	Developing sensitivity to the problems of minority groups (Social)	32	7	61
(7)	Developing good citizenship (Social)	26	4	70
(8)	Developing an interest and eagerness for learning (Academic)	20	11	69

Public School Assets

	Catholic	Public	No Difference
(1) Physical education programs (School operation)	4	60	36
(2) Provisions for slow learners (School operation)	14	48	38
(3) Preparation for a job (Practical)	10	35	55
(4) Physical condition of the school building (School operation)	13	32	55
(5) Preparation for college (School operation)	19	28	53
(6) Developing creativity and imagination (Academic)	11	22	67
(7) Teaching students to think for themselves (Personal)	14	17	69

The Elford data are supportive of the aforementioned dichotomy (all but one of the Catholic school assets are of a social or personal nature;[23] all public school assets, with one exception, are academic, school operation, or practical items), but also illustrate the complexity implicit in Cronin's Lincoln data (an academic item is numbered among the perceived assets of parochial schools, while a personal item is included under "Public School Assets;" also, the percentage of "No Difference" responses in both tables is extraordinarily high.) In addition, congruent with respondents in Denver, Savannah, and Belleville, those in

Indianapolis, Evansville, and Louisville were more emphatic in delineating Catholic school assets than they were in indicating the strong points of public schools (on only 4 of the 8 items listed under "Catholic School Assets" did "No Difference" responses exceed in number those indicating perceived Catholic school superiority; 5 of the 7 items included under "Public School Assets" elicited "No Difference" responses more frequently than responses favorable to public school superiority.) The Elford study, then, tends to confirm the Denver, Savannah, Fall River, and Belleville findings pertinent to the dichotomous perception of Catholic and public schools; the Denver, Savannah, and Belleville data on the differential intensity of imputations of functional superiority; and the Lincoln implications as to the complexity of perceptions of educational distinctiveness.

Donovan and Madaus dealt at length with the issue of "perceived distinctiveness" in their study of Catholic education in the Archdiocese of Boston. Respondents[24] were presented with 13 items (identical to those used in Fall River) and asked to indicate which schools--Catholic or public--they felt were more proficient on each. The percentaged response pattern for the entire sample (N=9,788), together with appropriate Notre Dame classification of individual items, appears below (Boston, 158):

	Catholic School better	Public School better	About the same or not sure
(1) Guidance and counseling services (Social)	22	26	52
(2) Developing good citizenship (Social)	20	18	51
(3) Developing sympathy for the problems and views of Negroes (Social)	16	17	66
(4) Preparation for college (School operation)	26	25	48
(5) Preparation for marriage and family life (Social)	41	14	45
(6) Preparation for a job (Practical)	10	36	51
(7) Teaching students to think for themselves (Personal)	13	37	50
(8) Physical condition of school buildings (School operation)	25	23	51
(9) Classroom discipline (Personal)	66	5	28
(10) Teaching children right from wrong (Religious)	43	7	49
(11) Teaching children to get along with other children (Social)	18	21	61
(12) Offering a wide range of courses (School operation)	6	55	38
(13) Having high quality teachers (School operation)	19	31	50

Perhaps the most outstanding feature of the Boston data is the abundance of responses in the "About the same or not sure" column.[25] On 11 of the 13 items (numbers 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, and 13) respondents were more likely to avoid making a choice or register uncertainty than to express a preference. In fact, on 8 of these 11 (numbers 1, 2, 3, 6, 7, 8, 11, and 13) the proportion of responses in the third column was equal to, or in excess of, the proportion of responses in the other two columns combined. In addition, where preferences were expressed, they tended to deviate somewhat from the dichotomous pattern witnessed in prior studies (Catholic schools reputedly superior on religious, social, and personal items; public schools perceived as superior on academic, school operation, and practical items.) Of the 6 items eliciting response distributions favorable to Catholic school functioning, two (numbers 4 and 8) were school operational in nature. Likewise, 4 of the 7 items on which functional superiority was attributed to public schools (numbers 1, 3, 7, and 11) were from the "Social" and "Personal" categories. Neither Catholic nor public school functioning won unparalleled endorsement relative to the other (as in Denver, Savannah, Belleville, and Indianapolis, where the differential imputation of superiority favored parochial schools.) Six (6) items (numbers 1, 2, 3, 4, 8, and 11) elicited support for Catholic and public education of roughly equal magnitude. Three (3) items (numbers 5, 9, and 10) and

4 items (numbers 6, 7, 12, and 13) evoked responses definitively favorable to parochial and public schools respectively. Boston findings, then, represent testimony to the complexity of perceptions of educational distinctiveness--of somewhat more elaborate vintage than the Lincoln data and even more pronounced than responses obtained in Indianapolis, Evansville, and Louisville.

A breakdown of Boston responses by Catholicity (Catholics/ non-Catholics) reveals minimal variation from the above pattern. For the 4,166 Catholics (Boston, 158):

	Catholic School better	Public School better	About the same or not sure
(1) Guidance and counseling services (Social)	27	26	47
(2) Developing good citizenship (Social)	30	14	57
(3) Developing sympathy for the problems and views of Negroes (Social)	26	11	61
(4) Preparation for college (School operation)	37	20	42
(5) Preparation for marriage and family life (Social)	57	8	34
(6) Preparation for a job (Practical)	17	34	48
(7) Teaching students to think for themselves (Personal)	22	28	50

	Catholic School better	Public School better	About the same or not sure
(8) Physical condition of school buildings (School operation)	30	25	44
(9) Classroom discipline (Personal)	75	3	22
(10) Teaching children right from wrong (Religious)	58	3	38
(11) Teaching children to get along with other children (Social)	27	14	59
(12) Offering a wide range of courses (School operation)	10	55	35
(13) Having high quality teachers (School operation)	28	26	46

For the 5,606 non-Catholics (Boston, 158):

	Catholic School better	Public School better	About the same or not sure
(1) Guidance and counseling services (Social)	18	26	56
(2) Developing good citizenship (Social)	14	22	65
(3) Developing sympathy for the problems and views of Negroes (Social)	9	21	69
(4) Preparation for college (School operation)	18	29	51
(5) Preparation for marriage and family life (Social)	29	19	53

		Catholic School better	Public School better	About the same or not sure
(6)	Preparation for a job (Practical)	6	38	55
(7)	Teaching students to think for themselves (Personal)	7	44	49
(8)	Physical condition of school buildings (School operation)	22	21	56
(9)	Classroom discipline (Personal)	60	7	33
(10)	Teaching children right from wrong (Religious)	32	10	57
(11)	Teaching children to get along with other children (Social)	12	26	61
(12)	Offering a wide range of courses (School operation)	4	55	41
(13)	Having high quality teachers (School operation)	13	35	52

Responses in the "About the same or not sure" column continue their preponderance. Among Catholic respondents, 9 items (numbers 1, 2, 3, 4, 6, 7, 8, 11, and 13) elicited such responses more frequently than expressions of preference ("Catholic school better" or "Public school better"). For 3 of these (numbers 2, 3, and 11), third column responses represented a majority of all responses. Among non-Catholics, 11 of the 13 items (numbers 1, 2, 3, 4, 5, 6, 7, 8, 10, 11, and 13) evoked "About the same or not sure" responses more often than expressions of preference, such responses representing a majority on 10 of the 11 (numbers 1, 2, 3, 4, 5, 6, 8, 10, 11, and 13.) Those Catholics who did express their preference for either Catholic or public schools on selected items did not conform rigidly to the aforementioned dichotomy. Of the 10 items eliciting a distribution of responses favorable to parochial schools (numbers 1, 2, 3, 4, 5, 8, 9, 10, 11, and 13), three (numbers 4, 8, and 13) were school operational in nature. Inversely, Catholics preferred public schools on 3 items (numbers 6, 7, and 12), one of which was from the "Personal" category (number 7). Non-Catholics, too, failed to respond exactly in the dichotomized fashion observable in other studies. Of the 4 items eliciting response patterns supportive of Catholic schools (numbers 5, 8, 9, and 10), one (number 8) was a "School operation" item. Nine (9) items (numbers 1, 2, 3, 4, 6, 7, 11, 12, and 13) drew definitive support for schools in the public sector, 5 of them (numbers 1, 2, 3, 7, and 11) being social or personal in nature.

Again, the performance of neither Catholic nor public schools captured excessively strong support relative to the other. Among Catholics, 4 items (numbers 1, 7, 8, and 13) elicited support for parochial and public education of nearly equal intensity. Seven (7) items (numbers 2, 3, 4; 5, 9, 10, and 11) elicited responses predominantly in favor of Catholic schools, while only 3 (numbers 6, 7, and 12) drew overall support for public educational facilities. Non-Catholics were evenly split in their preferences ("Catholic school better" vs. "Public school better") as expressed on item 8. Three (3) items (numbers 5, 9, and 10) evoked response distributions supportive of parochial schools, while the remaining 9 (numbers 1, 2, 3, 4, 6, 7, 11, 12, and 13) elicited response patterns partial to public education. The intensity with which superior functioning on selected items was accorded, then, varied with religious affiliation. Catholic respondents were more emphatic in their support of parochial schools on appropriate items than they were in their support of public schools on remaining items. Inversely, non-Catholics were more assertive in their item-by-item support of public schools.[26] The patterned differential imputation of superiority observed in Denver, Savannah, Belleville, and Indianapolis (i.e., the unchallenged primacy of parochial education in some functional areas; the questionable superiority of public education in others) was conspicuous by its absence in Boston. This absence may be attributable solely to the presence in the sample of non-Catholics (who tended to deflate the perceived advantages of parochial schools and magnify the alleged assets of public education). Fall River, the only other sample with a sizeable bloc of non-Catholic respondents, did not include a percentage breakdown of responses to the 13 items by Catholicity, however. Thus, a meaningful comparison becomes impossible.

At any rate, Boston data continue to highlight the complexity of perceptions of educational distinctiveness. Moreover, the above irregularities are consistent with Boston responses discussed in Section A (which revealed a certain turbulence among respondents in their attitudes toward Catholic education and Catholicism in general; i.e., an ameliorative awareness of various social ills, a proclivity for the informal and interpersonal expression of one's faith, and a willingness to veer away from the conventional parochial school--a remnant of the pre-Vatican II Church).

In answer to the first of two overarching questions posed at the outset of this section (What is seen as unique about Catholic schools?), it might be concluded that:

(1) Catholic schools are perceived as superior on religious, social, and personal items (Denver, Savannah, Fall River, Belleville, and Indianapolis).

(2) Conversely, public schools are perceived as superior on academic, school operation, and practical items (Denver, Savannah, Fall River, Belleville, and Indianapolis).

(3) Imputations of Catholic school superiority on religious, social, and personal items tend to be more emphatic than similar imputations of public school superiority on academic, school operation, and practical items (Denver, Savannah, and Belleville).

(4) Variations in the above patterns are not uncommon, however. Some respondents perceive parochial schools as superior to public schools from an academic, school operational, and/or practical standpoint (Lincoln, Indianapolis, and Boston). Others attribute primacy to public schools in the

areas of religious instruction and social and personal development (Indianapolis and Boston.) Many are cognizant of no significant functional differences and refuse to express a preference (Boston.) Where public school ascendancy is asserted, the assertion may be very emphatic (Boston.)

(5) While some regularity in responses is discernible, perceptions of educational distinctiveness are complex phenomena worthy of further attention.[27]

Quality. A review of the literature to this point indicates that: (a) American Catholics (and non-Catholics) do perceive Catholic (and public) schools as being somehow distinctive or unique in their own right (III-A. Demand: An Overview); (b) respondents are able to identify institutional traits contributive to this distinctiveness (i.e., effectiveness of parochial schools in the areas of religious instruction, and social and personal development/proficiency of public schools on academic, school operation, and practical items) (III-B. Demand: Determinants); and (c) there exists a patterned variation in assessments of the quality of Catholic (and public) educational facilities (i.e., younger, better educated, more affluent, suburban respondents tend to view public schools as "better"/their older, less educated, medium-to-low income, urban counterparts are more likely to prefer parochial schools) (III-A. Demand: An Overview). The provision of an answer to the second major question posed at the outset of this section (B), (What are the criteria upon which assessments of educational excellence are based ?), then, would not seem to be a difficult task. Very simply, the imputation of educational excellence appears to be, part and parcel, a matter of establishing personal priorities and acting in accordance with them. If one places a high price tag upon religious, social, and personal growth, he will gravitate toward the Catholic sector (where such growth is allegedly better fostered.) If academic, school operational, and practical superiority are the preferred products, however, then public education will be deemed worthy of support.

Indeed, the evaluation of educational programs may be just this simple (assessments based upon rank-ordered tastes and preferences). The gnawing skepticism inherent in social research demands its fill of empirical evidence, though. Thus, the remainder of this section (B) represents an attempt to satisfy this peculiar appetite for data. What appears to be a viable answer to the above question (i.e., personal priorities as the criteria upon which assessments of educational excellence are founded) will be treated as a hypothesis, and data from the pool of Catholic school studies (see Appendix B) will provide the appropriate test.

One methodological difficulty must be confronted, however, prior to commencement of the effort just outlined. In no study were respondents queried directly as to the criteria which they employ in evaluating school programs and facilities. Indicators must be selected, then, and operational definitions developed. How shall we know whether or not assessments of educational quality are a function of personal priorities? If we can assume that parents tend to provide for their children the best possible education (i.e., the highest quality instruction possible in the face of financial, transportation, and other considerations), can we not also assume that their stated reasons for enrolling their children where they have (or for not enrolling them elsewhere) are tantamount to their personal criteria for evaluating educational programs? The ensuing analysis rests upon these assumptions. Responses to questions eliciting reasons for enrollment (or non-enrollment) will be relied upon to furnish the required data. The initial hypothesis (i.e., personal priorities as criteria for assessments of educational quality) will be supported if "Religious," "Social," and "Personal" reasons are given for patronization of Catholic schools, and "Academic," "School Operation," and "Practical" reasons are given for failure to patronize Catholic schools and/or for patronization of public schools.

Notre Dame researchers in Denver, Savannah, Montgomery, Hillsborough County, and St. Louis grappled with this issue at some length. Respondents in Denver, the reader will recall, were presented with a list of 36 items, each of which dealt with the proficiency of schools in performing certain educational functions, and asked to indicate which type of school--Catholic or public--was more effective on each item. In addition, respondents were asked to list the three most important reasons for sending their children to the schools they were attending at that time (Catholic or public). Parents of Catholic school children provided the following reasons for enrolling their offspring in parochial schools (arranged in order of frequency of mention) (Denver, 137):

(1) Catholic schools are more likely to train children to be honest, truthful, and moral. (Personal)

(2) Catholic schools are more likely to teach children about God, Christ, and religion. (Religious)

(3) Catholic schools are more likely to teach children to practice their religion. (Religious)

(4) Catholic schools are more likely to discipline children to respect authority. (Personal)

(5) Catholic schools are more likely to train children in self-discipline and hard work. (Personal)

(6) Catholic schools are more likely to prepare children for college. (School operation)

(7) Catholic schools are more likely to take a personal interest in their students. (Personal)

(8) Catholic schools are more likely to make children good citizens of the United States. (Social)

(9) Catholic schools are more likely to train children to respect persons and property. (Personal)

(10) Catholic schools are more likely to teach children to think for themselves. (Personal)

Parents of public school students provided a similar rank-ordered list of reasons for utilizing schools in the public sector (Denver, 138):

(1) Public schools have more effective and qualified teachers. (School operation)

(2) Public schools have more adequate facilities and educational tools. (School operation)

(3) Public schools are more conveniently located and are more likely to provide transportation for school children. (Practical)

(4) Catholic schools are a serious financial burden for parents. (Practical)

(5) Public schools are more likely to teach children to think for themselves. (Personal)

(6) Public schools are more likely to prepare children for college. (School operation)

(7) Public schools are stronger in arithmetic and science. (Academic)

(8) Public schools are more likely to help gifted and slow learning children. (School operation)

(9) Public schools are more likely to expose children to a variety of attitudes and opinions. (Social)

Of those reasons given for the enrollment of children in Catholic schools, 9 of the 10 most frequently mentioned were religious, social, or personal in nature. Contrarily, academic, school operation, and practical items were dominant among reasons for public school utilization (7 of the 9 most frequently mentioned). Denver data, then, are supportive of the initial hypothesis (i.e., personal priorities as criteria of educational assessment). Additional support was forthcoming in Savannah.

Savannah respondents were exposed to the same instrument as were respondents in Denver, attributing superiority to either Catholic or public schools on each of 36 items. Unlike the Denver sample, however, they were also asked to indicate the degree of importance which they attached to each item (e.g., "Very Important," "Of Some Importance," "Of Little Importance"). Certain items on the questionnaire elicited a particularly strong consensus--that is, were answered either "Catholic" or "Public" by 70 to 90 percent of all respondents and were considered "Very Important." These items are listed below (Savannah, 152-153):

(1) Catholic schools are more likely to train children to be honest, truthful, and moral. (Personal)

(2) Catholic schools are more likely to discipline children to respect authority. (Personal)

(3) Catholic schools are more likely to teach children to practice their religion. (Religious)

(4) Catholic schools are more likely to make children good citizens of the United States. (Social)

(5) Catholic schools are more likely to provide children with close friends and good example. (Social)

(6) Catholic schools are more likely to teach children about Good, Christ, and religion. (Religious)

Several additional items also elicited a "Catholic" or "Public" response in excess of 70 percent, but were not perceived to be quite as important as those enumerated above (Savannah, 153-154):

(1) Catholic schools are more likely to encourage children to accept people of different races and nationalities. (Social)

(2) Catholic schools are more likely to prepare children for college. (Practical)

(3) Catholic schools are more likely to teach children to read and write clearly and well. (Academic)

(4) Catholic schools are more likely to teach children to get along with other people. (Social)

(5) Catholic schools are more likely to teach children to help others. (Social)

(6) Public schools are more likely to offer vocational education courses for those children who are interested. (School operation)

(7) Catholic schools are more likely to train children in self-discipline and hard work. (Personal)

(8) Catholic schools are more likely to allow time for prayer in the course of the day. (Religious)

(9) Catholic schools are more likely to foster tolerance of different religious beliefs. (Social)

(10) Catholic schools have more adequate classroom space. (School operation)

Of those items to which a considerable degree of importance was attached, 15 (of a total 16) elicited responses favorable to parochial schools. Of those 15, all but 2 were religious, social, or personal in nature. The lone item to which public school superiority was imputed was classifiable as "School Operation." Thus, insofar as items which are perceived as important are probably also key factors in the exercise of educational choice (parental decision as to where to enroll children), support is again thrown to our initial hypothesis. Apparently, Catholic schools are chosen for religious, social, and personal reasons, while public schools are selected for reasons of an academic, school operational, or practical nature.

Like respondents in Denver, those in Savannah were also asked to indicate the three most important reasons for sending their children to the schools which they were attending while research was ongoing (Catholic or public). Parents with children in Catholic schools provided the following reasons for their utilization of those schools (arranged in order of frequency of mention) (Savannah, 160):

(1) Catholic schools are more likely to train children to be honest, truthful, and moral. (Personal)

(2) Catholic schools are more likely to prepare children for college. (School operation)

(3) Catholic schools are more likely to teach children about God, Christ, and religion. (Religious)

(4) Catholic schools are more likely to encourage children to accept people of different races and nationalities. (Social)

(5) Catholic schools have more effective and qualified teachers. (School operation)

Public school parents also supplied reasons for their utilization of public educational facilities (arranged in order of frequency of mention) (Savannah, 161):

(1) Public schools are more likely to prepare children for college. (School operation)

(2) Public schools are more likely to help gifted and slow learning children. (School operation)

Despite the inclusion of two school operational items among the five most frequently cited reasons for patronization of Catholic schools, personal priorities as criteria for educational quality assessments (the hypothesis) continue to be supported. Religious, social, and personal items are preponderant among reasons for parochial school enrollment, while both reasons for public school enrollment are school operational. Both Denver and Savannah data, then, tend to confirm initial suspicions regarding the nature of imputations of academic excellence.

Montgomery, Hillsborough County, and St. Louis respondents were asked to select, from a list of 14 items, the 4 most decisive with respect to parents' electing to enroll their children in parochial schools. Response distributions for the three samples are shown below. For Montgomery (6 most frequently mentioned items, arranged in order of frequency of mention, numbers representing percentage of respondents mentioning item) (Montgomery, 59):

(1) Catholic schools teach children about God, Christ, and religion. (Religious) (64)

(2) Catholic schools train children to be honest, truthful, and moral. (Personal) (62)

(3) Catholic schools discipline children to respect authority. (Personal) (44)

(4) Catholic schools teach children to practice their religion. (Religious) (44)

(5) Catholic schools take a personal interest in their students. (Personal) (43)

(6) Catholic schools encourage children to accept people of different races and nationalities. (Social) (29)

For Hillsborough County (9 most frequently mentioned items, arranged in order of frequency of mention) (Hillsborough County 116-117):

(1) Catholic schools train children to be honest, truthful, and moral. (Personal)

(2) Catholic schools teach children about God, Christ, and religion. (Religious)

(3) Catholic schools discipline children to respect authority. (Personal)

(4) Catholic schools take a personal interest in their children. (Personal)

(5) Catholic schools teach children to practice their religion. (Religious)

(6) Catholic schools teach children to think for themselves. (Personal)

(7) Catholic schools prepare children for college. (School operation)

(8) Catholic schools encourage children to accept people of different races and nationalities. (Social)

(9) Catholic schools produce leaders for our nation and our communities. (Social)

For St. Louis (all 14 items, arranged in order of frequency of mention)

(St. Louis, 67-69):

(1) Catholic schools teach children about God, Christ, and religion. (Religious)

(2) Catholic schools train children to be honest, truthful, and moral. (Personal)

(3) Catholic schools discipline children to respect authority. (Personal)

(4) Catholic schools teach children to practice their religion. (Religious)

(5) Catholic schools take a personal interest in their children. (Personal)

(6) Catholic schools encourage children to accept people of different races and nationalities. (Social)

(7) Catholic schools teach children to think for themselves. (Personal)

(8) Catholic schools produce leaders for our nation and communities. (Social)

(9) Catholic schools prepare children for college. (School operation)

(10) Catholic schools help gifted and slow learning children. (School operation)

(11) Catholic schools teach children to read and write clearly and well. (Academic)

(12) Catholic schools train children for good jobs. (Practical)

(13) Catholic schools are strong in arithmetic and science. (Academic)

(14) Catholic schools have space for all the children who want to attend. (Practical)

Quite obviously, Montgomery, Hillsborough County, and St. Louis findings are congruent with conclusions drawn in Denver and Savannah. In Montgomery, the 6 most frequently mentioned reasons for enrolling children in parochial schools were either religious, social, or personal in nature. Eight (8) of the 9 reasons for Catholic school enrollment submitted by Hillsborough County parents were also religious, social, or personal. In St. Louis, religious, social, and personal reasons constituted all of the 8 most frequently given reasons, and none of those 6 least frequently submitted. On the basis of the above, it would not be unreasonable to conclude that religious, social, and personal considerations play major roles in decisions to enroll children in parochial schools. Inversely, it is apparent that academic, school operational, and practical items play relatively minor parts in such decisions. In other words, Montgomery, Hillsborough County, and St. Louis data indicate (as did Denver and Savannah data) that respondents utilize Catholic schools primarily to ensure the religious, social, and personal growth of their children.

Approaching the issue from the opposite direction, one might ask why parents withdraw their children from Catholic schools, or fail to enroll them in such schools in the first place. In short, why do parents utilize schools in the public sector? Analyses of parental responses in Denver and Savannah have already indicated that academic, school operational, and practical reasons are ascendant in the selection of public educational facilities over Catholic ones. Hillsborough County and St. Louis data tend to confirm these initial indications.

The parents of children in Catholic schools in Hillsborough County were asked whether or not each of 11 developments would cause a parent to withdraw his children from a parochial school.[28] Percentaged responses were as follows (Hillsborough County, 108-111):

	Yes	No	Don't Know
(1) 10-20 percent increase in tuition (Practical)*	14	69	12
(2) 25-50 percent increase in tuition (Practical)	74	10	13
(3) Sharp decline in the number of nuns to teach in the Catholic school (Religious)	38	45	13
(4) Inability of school to stay current in the field of science education (Academic)	39	39	16
(5) Loss of regional or state accreditation (School Operation)	74	12	8
(6) Overcrowded classroom conditions (School Operation)	53	30	13

	Yes	No	Don't Know
(7) Closing of a neighborhood Catholic school making bussing or a motor pool necessary (Practical)	33	50	13
(8) Increase in the number of minority group children in the school (Social)	8	77	10
(9) Construction of a modern public school in the area (Practical)	7	82	6
(10) Development of a Religious Education program which successfully attracts and serves Catholics in public schools (Religious)	16	64	15
(11) Elimination of competitive sports (School Operation)	13	73	9

*"Notre Dame" classification of items arbitrarily added.

The identical questions, when asked of Catholic school parents in St. Louis, yielded the percentagized response distributions displayed below (St. Louis, 60-65):

	Yes	No	Don't Know
(1) 10-20 percent increase in tuition (Practical)*	24	56	16
(2) 25-50 percent increase in tuition (Practical)	79	8	11
(3) Sharp decline in the number of nuns to teach in the Catholic school (Religious)	36	51	11

	Yes	No	Don't Know
(4) Inability of school to stay current in the field of science education (Academic)	40	38	19
(5) Loss of regional or state accreditation (School Operation)	80	10	7
(6) Overcrowded classroom conditions (School Operation)	62	22	14
(7) Closing of a neighborhood Catholic school making bussing or a motor pool necessary (Practical)	55	30	13
(8) Increase in the number of minority group children in the school (Social)	15	61	21
(9) Construction of a modern public school in the area (Practical)	8	81	8
(10) Development of a Religious Education program which successfully attracts and serves Catholics in public schools (Religious)	31	45	22
(11) Elimination of competitive sports (School Operation)	13	75	9

*"Notre Dame" classification of items arbitrarily added.

Apparently, Hillsborough County and St. Louis parents already utilizing Catholic schools are most unwilling to abandon them. Several hypothetical developments did elicit affirmative responses (i.e., "Yes, this would cause a parent to remove his children from

Catholic schools.") from more than half of the respondents in each sample, however. Items 2 (25-50 percent tuition increase), 5 (loss of accreditation), and 6 (overcrowded classrooms) were responded to positively by a majority of parents in both Hillsborough County and St. Louis. Item 7 (necessitation of bussing or a motor pool) captured more "Yes" than "No" responses in St. Louis only. Evidently, while parochial schools appeal to parents who value religious, social, and personal growth highly (more highly, let us say, than academic training or job preparation), certain occurrences (e.g., extreme tuition hikes, loss of accreditation, overcrowdedness, or great inconvenience) are capable of precipitating alterations in personal priorities, thus leading to a less favorable assessment of parochial education and subsequent withdrawal of Catholic school patronage. In other words, parents enroll their children in Catholic schools because they want them to experience religious, social, and personal growth (preferred items on the parental list of priorities). They do not desire this growth, however, at the expense of development in all other areas (loss of accreditation), or under conditions of extreme stress for both student and parents (tuition hikes, overcrowdedness, inconvenience). Religious training may be a very desirable educational commodity, but not when it must be purchased at exorbitant prices from a merchant whose dealership is subject to question. A balanced program of offerings, skewed slightly in the direction of the personal priorities of its clientele, appears to be the "best of all possible worlds" for the parochial (and presumably, public) school (e.g., the Catholic school in which religious, social, and personal growth is emphasized, but not to the detriment of academic, school operational, and practical considerations).

Notre Dame research in Denver, Savannah, Montgomery, Hillsborough County, and St. Louis, then, indicates that:

(1) Parents who utilize Catholic schools do so for religious, social, and personal reasons (Denver, Savannah, Montgomery, Hillsborough County, and St. Louis).

(2) Parents who utilize public schools do so for academic, school operational, and practical reasons (Denver, Savannah, Montgomery, Hillsborough County, and St. Louis).

(3) While Catholic school patrons want their children to experience religious, social, and personal growth (these are their uppermost educational priorities, and represent their primary reasons for enrolling their children in parochial schools), they do not want such growth to occur to the total detriment of other educational offerings (e.g., the academic, school operational, and practical features of public schools) (Hillsborough County and St. Louis).

(4) Insofar as enrollment decisions (parental exercise of educational choice) reflect assessments of educational quality, our initial hypothesis (personal priorities as criteria for assessments of educational quality) is supported.

Other research efforts have tended to confirm one or another of the Notre Dame findings reported above. Boise respondents, for example, were asked to select the most important advantages of enrolling a child in a Catholic school. The five most frequently mentioned assets, together with the percentage of respondents mentioning each and appropriate "Notre Dame" classification, appears below (Boise, I-6):

(1) Christian formation (Religious) (72.6)

(2) Better discipline (Personal) (8.9)

(3) Higher academic standards (Academic) (8.6)

(4) More favorable atmosphere (Personal) (5.6)

(5) Friendship with other Catholic children (Religious) (4.1)

Quite obviously, Catholics in Boise enroll their children in parochial schools in order that they might receive religious instruction. All other stated reasons are next to insignificant in comparison.

Belleville laymen were asked to list what they felt were important reasons for sending a child to a parochial school. The ten most frequently mentioned reasons, along with the percentage of respondents mentioning each and appropriate "Notre Dame" classification, were as follows (Belleville, 21):

(1) Religious or moral atmosphere in the school (Religious) (82)

(2) Giving students a sense of moral values (Religious) (78)

(3) Religious exercises (prayers, mass on school days) (Religious) (76)

(4) Nuns, brothers, or priests teaching religion (Religious) (76)

(5) Discipline (Personal) (68)

(6) Assurance that nothing contrary to the faith will be taught (Religious) (66)

(7) Previous experience with Catholic schools* (63)

(8) Quality of education (Academic) (61)

(9) Parental obligation to send children to Catholic school* (59)[30]

(10) Influence of Catholic Classmates (Religious) (52)

*Not classifiable on Notre Dame schema

Much like Boise Catholics, those in Belleville send their children to parochial schools essentially to receive religious training. Five (5) of the 6 most frequently mentioned reasons, and 6 of the total 10, were religious in nature.

Belleville Catholics were also asked to state considerations which they felt were of minimal importance in deciding where to enroll a child. The 6 most frequently mentioned items, together with the percentage of respondents mentioning each and proper "Notre Dame" categorization, are presented below (actually, in ascending order of perceived importance relative to the exercise of educational choice) (Belleville, 22):

(1) Racial mixture in public schools (Social) (75)

(2) Large number of lay teachers in Catholic schools (Religious) (72)

(3) Separate education for boys and girls (School Operation) (67)

(4) Use of uniforms in Catholic schools (School Operation) (64)

(5) Nuns, brothers, or priests teaching subjects other than religion (Religious) (56)

(6) Religious symbols in classrooms (statues, etc.) (Religious) (50)

Little can be gleaned from the above table regarding criteria involved in the exercise of educational choice. Perhaps its (the table's) most significant feature is the number of formerly crucial items now deemed unimportant (e.g., volume of lay teachers, display of religious symbols, separate education of the sexes). Belleville Catholics may well resemble those in Fall River and Boston in their apparent readiness to forego the old and try the new as far as religious instructional formats are concerned (see III-A. Demand: An Overview).

Similar to researchers in Boise and Belleville, Brickell asked his Rhode Island sample to list what they felt were the most important reasons for maintaining Catholic schools. The three most frequently mentioned reasons, arranged in order of frequency of mention and classified via "Notre Dame" categories, appear below (Rhode Island, 103-104):

(1) Religious or moral atmosphere in the school (Religious)

(2) Giving students a sense of moral values (Religious)

(3) Discipline (Personal)

As do Catholics in Boise and Belleville, those in Rhode Island also perceive their diocesan schools as vehicles of religious-moral instruction and use them accordingly.

Brickell, in addition, asked his respondents to list reasons for not maintaining a separate Catholic school system (and, in following, for patronizing public education). The three most frequently mentioned items, arranged in order of frequency of mention with appropriate "Notre Dame" classification, were as follows (Rhode Island, 104-105):

(1) Tuition costs (Practical)

(2) Distance of Catholic school from home (Practical)

(3) Separate education for boys and girls (School Operation)

Much like respondents in Hillsborough County and St. Louis, those in Rhode Island cited school operational and practical items as reasons for abandoning Catholic schools (and, presumably, for patronizing schools in the public sector).

Schiffgens, in studying the attitudes and perceptions of Catholic parents toward Catholic education in metropolitan Des Moines, partitioned her sample into 4 separate groups: (A) Parents having children currently enrolled in Catholic schools, (B) Parents who had withdrawn their children from Catholic schools during the previous two years, (C) Parents having only pre-first grade age children, and (D) Parents from parishes not maintaining elementary schools. Groups (A), (C), and (D) were asked to select, from a list of 6 statements, the 2 most important reasons for enrolling (as in the case of group A) or wanting to enroll (as in the case of groups C and D) their children in Catholic schools. The following percentagized breakdown of responses (with "Notre Dame" categories added) was obtained (Des Moines, 79):

	A	C	D	Total
To secure professional help in the religious education of my children (Religious)	26.2*	34.1	32.7	28.0
To provide my child with a God-centered education (Religious)	37.8	33.5	34.9	36.9
To fulfill an obligation I feel to support our Catholic schools**	7.3	2.5	6.6	6.5
To provide my child with the opportunity to participate in a quality educational program (Academic)	20.6	20.8	17.0	20.3
To give my child the opportunity for making strong Catholic relationships (Religious)	6.0	6.4	7.3	6.2
Other	2.1	2.7	1.5	2.1
	100.0	100.0	100.0	100.0

*Percentages based on total number of responses to 6 options of this questionnaire item.

**Not classifiable on "Notre Dame" schema.

Correspondingly, group (B) was asked to select, from a list of 8 statements, the 2 most important reasons for their withdrawal of their children from Catholic educational institutions during the 2 years preceding. The following percentagized breakdown of responses (with "Notre Dame" categories added) was obtained (Des Moines, 106):

	B
The public school offers a better program (School operation)	30.3*
Catholic education is too expensive (Practical)	10.3
Classes in the Catholic school are too large (School operation)	18.2
Discipline in the Catholic school is too strict (Personal)	2.0
The number of lay teachers is excessive (School operation)	7.4
Catholic schools fashion closed minds, ill-preparing students for the ecumenical dimensions of modern life (Practical)	7.2
The distance to the Catholic school provided a transportation problem which we were unable to solve (Practical)	6.2
Other	18.4
	100.0

*Percentages based on total number of responses to 8 options of this questionnaire item.

Consistent with the Notre Dame studies, as well as with those conducted in Boise, Belleville, and Rhode Island, reasons given in Des Moines for utilization, or hoped-for utilization, of parochial schools were largely of a religious nature (3 of 5 reasons submitted, as well as the 2 most frequently mentioned). On the other hand, the 2 most frequently submitted reasons for prior withdrawal from the Catholic sector (not including the 18.4 percent who answered "Other") were school operational in nature (also consistent with previous research). Apparently, Catholic schools in Des Moines, like those elsewhere, are noted for their provision of religious-moral instruction, while their public counterparts are perceived as superior in operational efficiency and overall practicality.

Elford asked his Indianapolis, Evansville, and Louisville respondents to indicate what they felt were important reasons for sending children to Catholic schools. The resultant distribution of responses (arranged in order of frequency of mention, numbers representing percentage of respondents mentioning each item, "Notre Dame" categories added) appears below (Indianapolis, 36):

Religious or moral atmosphere in school (Religious) (89)
Giving students sense of moral values (Religious) (85)
Nuns, brothers, priests teaching religion (Religious) (85)
Religious exercises (prayers before Mass, etc.) (Religious) (81)

Discipline (Personal) (76)

Previous experience with Catholic schools* (67)

Assurance nothing contrary to faith taught (Religious)(67)

Parental obligation to send to a Catholic school* (63)

Quality of education (Academic) (58)

Influence of Catholic classmates (Religious) (56)

*Not classifiable on "Notre Dame" schema.

Elford also asked respondents to indicate important reasons for not sending children to Catholic schools. Response patterns obtained (arranged in order of frequency of mention, numbers representing percentage of respondents mentioning each item, "Notre Dame" categories added) were as follows (Indianapolis, 45):

Tuition costs (Practical) (46)

Distance home to school (Practical) (42)

Separate education for boys and girls (School operation) (26)

Quality of education (Academic) (25)

Large number of lay teachers in Catholic schools (Religious) (23)

Developing personal freedom and responsibility (Personal) (12)

Previous experience with Catholic schools* (8)

*Not classifiable on "Notre Dame" schema.

Six (6) of the 10 most frequently mentioned reasons for Catholic school enrollment of children, including the first 4 of these, were of the religious variety. Among reasons for non-enrollment, 4 of 7 were either school operational or practical in nature. Again, consistent with all research reported thus far, the appeal of parochial schools was based upon religious, social, and personal items; that of public schools, upon academic, school operational, and practical ones. Selection of one or the other as superior appears to be a function of one's personal set of priorities.[31]

Donovan and Madaus included the following tables in their Boston research report (Boston, 169, 178):

Reasons of Catholic Parents for Sending Their Children to Catholic School, By Age of Parent (Percentage Mentioning Each Reason)

	Under 30		30-39		40-54	
Age of child	6-12	15-18	6-12	15-18	6-12	15-18
Total N	19	a	90	a	44	38
Better religious training (Better Catholic education) (Religious)*	52	--	62	--	56	47
Respondent attended Catholic schools**	18	--	23	--	13	11
Religious teachers (Religious)	2	--	11	--	0	12
Discipline (Personal)	11	--	30	--	20	17
Dissatisfied with public schools**	0	--	2	--	5	4

Reasons of Catholic Parents for Sending Their Children to Catholic School, By Age of Parent (Percentage Mentioning Each Reason) (Con't)

	Under 30		30-39		40-54	
Age of child	6-12	15-18	6-12	15-18	6-12	15-18
Total N	19	a	90	a	44	38
Expediency--Catholic school nearer (Practical)	2	--	8	--	9	5
Religious environment (Religious)	10	--	2	--	17	9
Quality better than public schools (Academic)	75	--	45	--	36	46
Better preparation for college (School operation)	0	--	4	--	0	10
Kids wanted to go**	0	--	0	--	0	12
Other reasons	0	--	2	--	5	0

[a] Insufficient cases

*"Notre Dame" categories added

**Not classifiable on "Notre Dame" schema

Reasons of Catholic Parents for Sending Their Children to Public Schools, By Age of Parent (Percentage Mentioning Each Reason)

	Under 30		30-39		40-54	
Age of child	6-12	15-18	6-12	15-18	6-12	15-18
Total N	105	a	269	a	65	87
Catholic school classes too large (School operation)*	15	--	13	--	7	7
Expediency--Catholic school not available (Practical)	32	--	46	--	43	44

Reasons of Catholic Parents for Sending Their Children to Public Schools, By Age of Parent (Percentage Mentioning Each Reason) (Con't)

	Under 30		30-39		40-54	
Age of child	6-12	15-18	6-12	15-18	6-12	15-18
Total N	105	a	269	a	65	87
Children started in public schools**	1	--	1	--	0	7
Better to mix with other kinds of children (Social)	10	--	11	--	9	9
Public schools better or as good (Academic)	26	--	33	--	31	24
Respondent went to public school**	2	--	3	--	0	4
Could not afford Catholic schools (Practical)	21	--	10	--	19	9
Children wanted to go**	8	--	1	--	0	3
Bad experience with Catholic schools**	3	--	3	--	5	7
Too much religion taught in Catholic schools (Religious)	5	--	7	--	16	5
Other	1	--	1	--	0	0

[a] Insufficient cases

*"Notre Dame" categories added

**Not classifiable on "Notre Dame" schema

Boston respondents again proved to be exceptions to the rule to some degree. Religious training was a major reason for sending children to Catholic schools, but so was academic quality--especially among younger parents. Reasons for public school enrollment provided a somewhat more regular distribution, practical and academic items enjoying most frequent mention. The Boston data provide us with a reminder, as they have before, that while any number of response patterns may be regularly discernible, none is absolutely inevitable.

Data from Boise, Belleville, Rhode Island, Des Moines, Indianapolis, and Boston, then, do not augment the Notre Dame findings discussed earlier (except for the cautionary note extracted from the work of Donovan and Madaus), but rather contribute supportive evidence. In order to avoid needless redundancy, a "re-hash" of those findings will not be undertaken at this point. Let it suffice to state that: (a) insofar as Catholic schools are attributed superiority on religious, social, and personal items; and public schools on academic, school operation, and practical ones, (b) insofar as Catholic and public schools are selected by parents on the basis of their differential proficiency on these items (i.e., Catholic schools are selected precisely because of their alleged superiority on religious, social, and personal items; public schools because of their academic, school operational, and practical advantages), (c) insofar as the exercise of educational choice (i.e., parental enrollment decisions) is a quality-based decision (that is, a particular school is selected because it is perceived as "better," however "better" may be defined), and (d) insofar as the ultimate enrollment of the child reflects the parent's assessment of differential educational quality (e.g., selection of a parochial school implies a more favorable assessment of that school relative to available alternatives, and an attraction to the perceived assets of parochial education), then our simplistic hypothesis is supported (i.e., then personal, education-related priorities are the criteria upon which quality assessments of educational programs are based). The authors feel that the initial hypothesis has weathered the data well, and is deserving of some modicum of acceptance. The role of personal priorities in the exercise of educational choice should become clarified in the ensuing section (B) summary.[32]

Summary. An attempt to treat, at some length, the perceived distinctiveness and perceived quality of Catholic education has indicated that:

(1) Catholic schools are perceived as superior on religious, social, and personal items.

(2) Public schools are perceived as superior on academic, school operation, and practical items.

(3) This differential imputation of superiority enjoys a great deal of universality, and tends to be characteristic of all residential, income, age, and educational subsamples.

(4) Quality assessments of educational programs, and subsequent decisions as to where to enroll one's children

(the exercise of educational choice), are essentially a function of one's personal, education-related set of priorities (e.g., one who places a higher relative price tag upon religious, social, and personal growth will tend to gravitate toward the Catholic sector where such growth is allegedly better fostered).

(5) Insofar as perceptions of educational distinctiveness and quality are complex phenomena, variations in the above patterns are not uncommon.

C. Demand: Trends and Projections.[33]

Sections A and B have revealed that while there exists an overall consensus as to the distinctive offerings of both parochial and public schools (parochial schools perceived as superior on religious, social, and personal items/public schools attributed superiority on academic, school operational, and practical items) (demand based upon perceived distincitveness), there remains considerable variance in assessments of the relative quality of such schools (demand based upon perceived comparative quality). Generally speaking, younger, better education, upper income, suburban lay respondents favor public institutions, while their older, less educated, middle to lower income, urban counterparts are supportive of Catholic schools. Apparently, quality assessments of educational programs are a function of one's personal set of priorities (i.e., If one values above all else religious, social, and personal growth, he will likely gravitate toward the Catholic sector; inversely, if one places a higher relative price tag upon academic excellence, operational efficiency, and basic practicality, he will tend to look favorably upon public education). In turn, priorities seem to vary meaningfully with lifestyle and the determinants thereof (e.g., age, level of educational attainment, income, area of residence).

In short, "American Catholic 1971" (a) is a certain age, (b) has been exposed to a specified amount of formal education, (c) has an income

(d) lives in one or another residential area, (e) possesses a personal set of values or priorities which has been fashioned, to some extent, by his socio-economic (age, educational, financial, and residential) status, (f) recognizes the relative assets and liabilities of parochial and public education, and (g) favors (perceives as "better") the one which provides most amply for those items (e.g., religious instruction, academic training) that are uppermost on his "list" of priorities.

The above information affords a rather static portrayal of the demand for Catholic education, however. Is an assessment of demand over time at all feasible? Are there any observable trends or chronological patterns? Is it possible to project the nature and extent of future demand? It is to these questions that this section (C) is addressed.[34]

Glenn and Hyland, in a secondary analysis of national surveys pertaining to the relative economic, occupational, and educational status of Protestants and Catholics,[35] found that since World War II Catholics have surpassed Protestants in most aspects of status (both groups lagging behind Jews, however). In 1943 Protestants were well above Catholics in economic status, whereas by 1964 Catholics had clearly overtaken Protestants.[36] From 1945 to 1964 Protestant representation in nonmanual occupations decreased, while Catholic representation increased sharply. Correspondingly, Protestant and Catholic representation in manual occupations increased and decreased respectively.[37] Changes in representation at three broad educational levels were similar to occupational changes. Protestant representation increased at the lowest level ("No more than 8 years of school") and declined at the two higher levels ("At least some high school but no college" and "At least some college"), while Catholic representation declined at the lowest level and increased at the high school and college levels.[38] Protestants ranked clearly ahead of Catholics in educational status in 1945, but by 1964 the relative positions of the two religious groups had become ambiguous. Catholics had moved ahead in median years of school completed,[39] but were still under-represented at the college level (although this under-representation seemed to be disappearing among the youngest adults). Glenn and Hyland concluded: "It is clear that Catholics as a whole have experienced more net upward mobility during the postwar period than Protestants."[40]

The makeup of the American Catholic population, then, has undergone, and continues to undergo, notable alterations. The Catholic layman is now more affluent, better educated, and occupationally more secure than ever before. In short, American Catholics are beginning to occupy, at an increasing rate, precisely those social categories in which the demand for parochial schools is least emphatic (according to various diocesan studies).[41] In addition, they seem to be taking on the educational tastes and preferences characteristic of incumbent occupants (academic excellence, operational efficiency, and general practicality receive top priority as criteria in quality assessments of educational programs).[42] Public education thus assumes a greater degree of attractiveness among members of this mobile group (Notre Dame research in Montgomery, Hillsborough County, and St. Louis suggests that this newly won attractiveness among upwardly mobile Catholics is bolstered by the presence of impressive public school plants in upper income, suburban communities). On these grounds, an overall decrease in the demand for Catholic education might be forecast.[43]

The reader might require, and rightly so, that the broad assertions issued above be accompanied by some specific findings from the studies reviewed thus far. Fortunately, he can be accommodated. OER researchers in Montgomery, Hillsborough County, and St. Louis, for example, presented respondents with a list of 21 student traits and asked them to choose the 4 most important and the 4 least important. In other words, respondents were being asked to specify those qualities which they felt were and were not important for a student to acquire as a result of his educational experience. Percentagized Montgomery responses were as follows (Montgomery, 61):

Most Important Trait

(1) Intellectually curious (Academic) (63)
(2) Respects authority (Personal) (62)
(3) Independent thinker (Academic) (38)
(4) Reads a great deal (Academic) (36)

Least Important Trait

(1) Politically active (Social) (59)
(2) Holds unpopular opinions forcefully (Academic) (49)
(3) Socially graceful (Social) (45)
(4) Takes part in athletics (Social) (40)

The percentagized responses of Hillsborough County laymen are shown below (Hillsborough County, 120):

Most Important Trait

(1) Intellectually curious (Academic) (63)
(2) Respects authority (Personal) (62)
(3) Independent thinker (Academic) (38)
(4) Reads a great deal (Academic) (37)

Least Important Trait

(1) Politically active (Social) (56)
(2) Holds unpopular opinions forcefully (Academic) (49)
(3) Socially graceful (Social) (48)
(4) Takes part in athletics (Social) (38)

Percentagized St. Louis responses were as follows (St. Louis, 73-75):

Most Important Trait

(1) Respects authority (Personal) (64)
(2) Intellectually curious (Academic) (58)
(3) Reads a great deal (Academic) (37)
(4) Independent thinker (Academic) (34)
(5) Contributes to class discussions (Academic) (32)
(6) Competitive in class (Academic) (20)
(7) Attends Mass weekly (Religious) (20)
(8) Receives communion regularly (Religious) (20)
(9) Behaves appropriately at all times (Personal) (18)

Of note in the above tables is a consistent discrepancy between the reasons given for Catholic school enrollment (see section B) and the expectations held for students upon completion of a course of instruction. Respondents overwhelmingly offered religious, social, and personal reasons when asked why a parent would patronize Catholic schools (again, refer to section B). All, however, regardless of where they enrolled their children, felt that academic qualities were the most important acquisitions a student could realize. Three (3) of the 4 "most important" traits in both Montgomery and Hillsborough County were academic in nature. Of the 6 "most important" traits in St. Louis, 5 were academic. Inversely, those traits perceived as "least important" in Montgomery and Hillsborough County tended to be of the social variety (3 out of 4 in both studies). Manifestly, then, laymen provided a religiously, social or personally founded rationale for the enrollment of their children in Catholic schools. Latently, however, they placed top priority upon the acquisition of academic qualities as the result of their matriculation (in a parochial or public setting). Furthermore, there is reason to believe (Glenn and Hyland article, diocesan studies) that, increasingly, this proclivity for academic preparation is becoming quite manifest (resultant of upward social mobility, and changing tastes, preferences, and priorities) and, in fact, is replacing religious, social and personal considerations as the prime criterion in the exercise of educational choice among American

Catholics. Thus, earlier projections of a decreasing demand for Catholic schools appear to receive support.

Notre Dame findings in Montgomery, Hillsborough County, and St. Louis are bolstered by data obtained in Lincoln and Des Moines. Lincoln respondents, for example, were presented with the following item: "When considering the importance of status, when the time for high school is finished, which of the following would you want your child to have accomplished?" The percentagized distribution of responses (with "Notre Dame" classification of items added) appears below (Lincoln, 42):

(1) Scholastic achievement (Academic) (61.9)
(2) Leadership development (Personal) (23.1)
(3) Graduated with high school diploma* (13.0)
(4) Popularity and acceptance by classmates (Social) (1.4)
(5) A star athlete or cheerleader (Social) (0.4)

*Not classifiable on "Notre Dame" schema.

Although the Lincoln question on educational expectations included but 5 response options, something of a pattern is discernible. The lone academic item was mentioned most frequently (almost 3 times as often as the next most frequently mentioned item). One (1) personal and 1 non-classifiable item followed, while the 2 social items were referred to least frequently of all.

Schiffgens' Des Moines data, while not as emphatic (as Montgomery, Hillsborough County, St. Louis, or Lincoln data) in indicating a decreasing demand for parochial schools, does nevertheless belie a reasonably strong academic-school operational-practical strain in parental educational expectations. To recall, the author was working with 4 distinct response groups: (a) Parents having children currently enrolled in Catholic schools from the 14 parishes in metropolitan Des Moines maintaining elementary schools, (b) Parents who had withdrawn their children from Catholic schools during the 2 years prior to the study, (c) Parents having only pre-first grade age children from the 14 parishes in metropolitan Des Moines maintaining elementary schools, and (d) Parents of pre-school, elementary, and/or high school age children from the 5 metropolitan Des Moines parishes not maintaining elementary schools. When groups (a), (b), and (c) were questioned as to their expectations for their children from Catholic school attendance, the following percentagized response pattern (with "Notre Dame" classification of items added) was obtained (Des Moines, 90, 95):

	(a)	(b)	(c)
(1) That he will grow daily in his appreciation for the gift of faith (Religious)	25.1	28.0	24.2
(2) That he will have adequate academic preparation for further education and/or employment opportunity (Academic-Social Operation-Practical)	24.5	21.7	26.4

	(a)	(b)	(c)
(3) That he will acquire a mature sense of responsibility toward the exercise of human freedom (Social)	15.0	10.4	15.5
(4) That he will develop a maturity of conscience based on a Christian value system (Religious)	33.3	37.6	32.6
(5) Other	1.2	2.3	1.3

Lincoln and, to a lesser extent, Des Moines data, then, augment Notre Dame findings in Montgomery, Hillsborough County, and St. Louis, and are supportive of claims of a decreasing demand for Catholic education. Apparently, more and more Catholics are becoming desirous of the featured qualities of public schools, and enrollment data (see appropriate sections of the overall report) indicate that an increasing proportion of these are enacting such desires in their exercise of educational choice.

Insofar as Catholic school attendance is decreasing, and the utilization, by Catholics, of public school facilities is increasing, one might inquire as to the net effect of these shifts in enrollment upon the attitudes of those involved. For example, will extended Catholic patronization of public schools affect in the Catholic camp a dissatisfaction similar to that now being leveled at parochial education? Data obtained via Notre Dame research in St. Louis (which represents, to date, the most exhaustive analysis of a single diocesan school system) indicate no such thing. In fact, those Catholic parents with children enrolled in public schools while research was ongoing were less likely to feel that the quality of Catholic schools in St. Louis was satisfactory (St. Louis, 106), did not think that Catholic schools were better than non-Catholic schools in their area of the city (St. Louis, 108), were more likely to feel that the differences between Catholic and public schools were no longer great enough to justify two separate school systems (St. Louis, 110) thought that Catholics who go to public schools turn out to be just as good Catholics as those who attend parochial schools (St. Louis, 114), were more likely to reject the idea that CCD programs will never be as effective in training young Catholics as the schools have been (St. Louis, 116), and felt that improved CCD programs should replace the conventional Catholic school approach (St. Louis, 120). In short, those Catholic parents who do utilize schools in the public sector appear to be more than satisfied with the output. Furthermore, there is no reason to expect a significant change in this pattern of patronization and subsequent endorsement. St. Louis breakdowns by "use", then, lend further credence to preliminary projections of a diminishing demand for parochial schools.[44]

The reader might caution that the above is a model example of the dissonance-reducing reaction-formation highlighted in footnote 17. Such an assertion cannot be disputed. The fact remains, however, that regardless of their source, attitudes supportive of public education and critical of Catholic education will have a singular effect upon both patterns of demand and subsequent enrollment.[45] Prior projections of decreasing demand thus remain intact.

Footnotes

1. The Corpus Christi study was initiated for the express purpose of assessing the feasibility of constructing a Catholic high school in the diocese. Its limited scope is thus understandable.

2. As operationalized in the Dubuque study, "Christian education" was equivalent to education received in a Catholic school.

3. Attitudinal data obtained in Pittsburgh is useful, however, the manner in which it is displayed in the text of the published report is highly questionable, and possibly very misleading. Respondents were presented with a battery of statements, and asked to select and circle one of the following response alternatives: ++ + - --. Obviously, alternatives ranged from highly favorable or affirmative (++) to highly unfavorable or negative (--) with more moderate responses in between (+ and -). In presenting the findings, the author (the director of an independent research firm was commissioned to conduct the attitudinal survey) merely indicated the modal response to each item. The mode was circled if it also represented the response of a majority of the sample. Needless to say, such a practice can easily distort the overall flavor of reactions to particular items. Response patterns or distributions become meaningless, and those responses not falling within the modal category, however significant they might be, may as well be discarded. For example, a statement pertaining to the quality of guidance programs in Catholic high schools might elicit a response pattern much like that below:

++	35 percent
+	10 percent
-	30 percent
--	25 percent

The modal response is ++, leading one to believe that sample respondents are highly pleased with guidance services in Catholic secondary schools. A knowledge of the total array of responses, however, leaves one with quite a different impression. Indeed, 55 percent of those questioned are dissatisfied with services rendered. The implications of such inaccuracy for data interpretation and utilization are self-explanatory. The Pittsburgh attitudinal is thus left in a rather vulnerable light.

4. Respondents were categorized according to various socio-economic characteristics (e.g., age, marital status, occupation, education, in-

come). In all, there were 28 groupings. The categories were not mutually exclusive. For instance, each respondent necessarily occupied one of the age categories, one of the marital categories, and so on.

5. At the time of publication (1968) there existed only one Catholic high school in Marquette.

6. The Fall River sample, selected by Louis Harris Associates, included non-Catholics as well as Catholics.

7. One should not read into the Des Moines and Fall River data an over-reliance of Catholics upon their schools. Elford, for example, found 82 percent of his respondents in disagreement with an item indicating that parents totally fulfilled their obligation to provide a religious education for their children by enrolling them in Catholic schools (Indianapolis revised, 19).

8. The Boston sample also included non-Catholics.

9. Percentages are based upon the responses of clergy and religious, as well as laymen. It might be conjectured, then, that any inaccuracies are in the direction of an over-estimation of lay support for Catholic schools. Insofar as laymen constituted the bulk of the Catholic sub-sample, such inaccuracies should be minimal.

10. This finding is supported by data from a number of other studies not cited at this point in the text: Forty-two (42) percent of the Belleville sample felt that, in lieu of rising costs, some diocesan education programs should be cut (38 percent disagreed) (Belleville, 120). When asked which grades should be cut first and last should such elimination become necessary, respondents answered as follows (Belleville, 121, 124):

Grades	Cut First	Cut Last
1-4	22 percent	40 percent
5-8	10 percent	21 percent
9-12	43 percent	14 percent

No matter how the issue was approached, Catholic high schools fared worse than both primary and upper elementary grades in the diocese of Belleville. More respondents (43 percent) felt that secondary education should be discontinued first, while fewer (14 percent) thought that grades

9-12 should be cut last. In addition, 45 percent felt that the high school years, moreso than any others, were years in which association with those of other faiths was highly desirable (Belleville, 20).

Boise respondents were asked to consider the financial problems currently besetting Catholic education and express an opinion as to whether or not the diocese should continue operating all of its schools. Just 5.3 percent felt that only high schools should be maintained, while 23.2 percent thought that elementary schools should be continued -- even if at the expense of secondary schools (62.8 percent wanted both elementary and secondary programs maintained, while 8.7 percent wanted the diocese of Boise out of the "education business" entirely) (Boise, I-5).

Schiffgrens asked her Des Moines respondents which grades should be given top priority if the diocese found itself unable to continue its support of Catholic education at all levels. She found that support for Catholic high schools varied directly with the level of educational attainment of the respondent. In all educational categories, however, elementary schools received more support than secondary schools (Des Moines, 195-196). In Pittsburgh, parishioners were asked to comment upon a number of avenues which diocesan schools might follow should they be confronted with a major financial crisis. The alternatives, together with the modal responses to them (see footnote 3 for an explanation of the manner in which Pittsburgh data is displayed), are presented below (Pittsburgh, 246-247):

Close grades 1-6 - -
Close grades 7-8 - -
Close grades 9-12 - -
Close all schools - -

Quite obviously, Catholics in Pittsburgh were intensely opposed to the elimination of parochial schools on any level. Interestingly enough, however, only the modal negative response to the discontinuance of grades 9-12 was not also a majority response.

Cronin asked respondents in Lincoln to indicate which grades they felt were least important, the ones they would be most willing to see cut should diocesan schools run into severe financial difficulties. Responses were distributed as follows:

Grades	
1 and/or 2	18.7 percent
1-6	8.9 percent
7-9	5.6 percent
10-12	22.0 percent
7-12	12.9 percent
9-12	27.9 percent
1-12	4.0 percent

Catholics in Lincoln, then, considered grades 9-12 the most expendable. A much higher pricetag was placed upon Catholic education at the elementary level (Lincoln, 54).

Elford asked Catholics in Indianapolis, Evansville, and Louisville to indicate which grades they felt should be eliminated last should closings be necessary. Percentagized results for each diocese, as well as for all 3 dioceses, are as follows (Indianapolis revised, 61):

	1-4	5-8	9-12
Indianapolis	48	19	20
Evansville	45	22	16
Louisville	38	20	28
Overall	45	20	21

In Indianapolis grades 5-8 and 9-12 were viewed as least necessary, while a great deal of support was mustered for the primary grades. Evansville respondents were most willing to part with grades 9-12 and least receptive to the elimination of grades 1-4. Louisville Catholics gave grades 1-4 top priority while ranking grades 9-12 second and grades 5-8 third in order of importance. Overall, the Elford sample responded most favorably to grades 1-4, and felt that either grades 5-8 or 9-12 should be elimininated initially should such action be necessitated. When asked which grade levels should be cut first, 29 percent indicated the elementary grades while 44 percent thought grades 9-12 should be the first to go (Indianapolis revised, Table 6).

Responses to several other Elford items may help specify the above. Indianapolis, Evansville, and Louisville respondents were presented with the following alternatives to the conventional K-8/9-12 parochial school format:

(1) Close grade 1-3; stress middle school concept.

(2) Replace elementary schools with CCD programs.

(3) Close grades 7-8; stress grades 1-6.

(4) Initiate shared time programs on elementary level.

(5) Initiate released time programs on elementary level.

(6) Close high schools; use parishes as religious education centers for high school age children.

(7) Close high schools; construct religious education centers adjacent to public high schools.

(8) Initiate shared time programs on secondary level.

The percent of respondents in each diocese opposed to the various alternatives (numbered), as well as the overall opposition rates, are displayed below (Indianapolis, 57, 59):

	Indianapolis	Evansville	Louisville	Total
(1)	63	66	59	62
(2)	58	61	57	59
(3)	50	58	58	55
(4)	60	58	53	59
(5)	53	49	52	52
(6)	42	40	50	44
(7)	31	28	29	30
(8)	57	54	49	56

Only 2 alternatives fail to gain a majority in opposition, and both of these involve the closing of secondary schools (numbers 6 and 7). In fact, all other cells except one (only 49 percent of the Louisville sample opposed a shared time program on the high school level) display percentages of over 50 (52 percent or more).

Elford also asked respondents in his 3 diocese sample whether or not they supported the construction of additional Catholic grade and high schools. In other words, how did respondents feel about strengthening and expanding traditional programs (as opposed to abandoning them for less conventional alternatives)? The percentagized responses of those opposed were distributed as follows (Indianapolis, 57, 59):

	Indianapolis	Evansville	Louisville	Total
Build more grade schools	39	37	40	39
Build more high schools	53	54	45	50

In each diocese, the proportion of those opposed to the construction of additional high schools exceeded the proportion set against the building of more grade schools. Quite clearly, Catholics in Indianapolis, Evansville, and Louisville register more support for their elementary schools than for their secondary schools.

Respondents in Dubuque were asked whether or not the diocese should discontinue its educational programs at some grade levels should rising costs prove to be prohibitive. Only 21.3 percent objected to such action, while 64.3 percent rendered their approval (Dubuque, Table 18). In order to determine which specific course of action would be most palatable to parishioners, Dubuque researchers asked respondents to agree or disagree with a number of alternatives. The alternatives, together with the appropriate percentagized responses, are presented below (Dubuque, Tables 38-44):

	Agree	Disagree
(1) Close grades 1-3; concentrate on grades 4-8	23.2	59.5
(2) Close elementary schools; open religious education centers for elementary school age children	31.6	55.5
(3) Close high schools; open religious education centers for high school age children	47.8	38.8
(4) Close grades 7-8; concentrate on grades 1-6	39.9	41.5

	Agree	Disagree
(5) Have Catholic children take some courses (i.e., math, sciences) in public elementary school, and others (i.e., religion, social studies) in parochial elementary schools	43.3	40.5
(6) Have Catholic children take some courses (i.e., math, sciences) in public high schools, and others (i.e., religion, social studies) in parochial high schools	48.8	36.5
(7) Construct religious facilities near public high schools	59.0	19.5

Negative responses exceeded positive response for all but 3 alternatives (numbers 3, 6, and 7), and each of these involved the closure or more limited utilization of Catholic high schools. Respondents in Dubuque, then, are quite willing to experiment with alternatives to conventional Catholic secondary education, but are not willing to do so with the time-honored parochial grade school.

Notre Dame researchers asked Catholics in Hillsborough County, Montgomery, and St. Louis to respond to the following alternative to traditional Catholic elementary schools: "Catholic elementary schools in your community would gradually be closed. The money saved would be used to set up Religious Education Centers -- staffed by full-time sisters and lay people especially trained in religious education." Percentagized responses were as follows (Hillsborough County, 280; Montgomery, 137; and St. Louis, 264):

	Agree	Disagree
Hillsborough County	28	58
Montgomery	35	50
St. Louis	39	46

In each case, more respondents were opposed to the suggestion than favored it.

A similar item pertained to Catholic high schools: "Catholic high schools in your community would be gradually closed. The money saved would be used to set up Religious Education Centers--staffed by full-time sisters and lay people especially trained in religious education." Percentagized responses were as follows (Hillsborough County, 283; Montgomery, 138; and St. Louis, 266):

	Agree	Disagree
Hillsborough County	28	58
Montgomery	35	50
St. Louis	39	46

Again, in all 3 studies negative responses were more frequent than affirmative ones. Respondents were somewhat less emphatic in their disagreement with the latter item, however, than with the former.

The concensus seems to be, then, that elementary schools are a more highly valued component of Catholic education than secondary schools. This current is not unanimous, however. Brickell found Rhode Island Catholics to be evenly split in their support of parochial grade schools and high schools. Roughly half of his sample felt elementary schools should be closed first if need be, while an equal proportion of respondents thought secondary schools should be the first to go (Rhode Island, 105). Inversely, those who wanted grade (high) schools to be eliminated first also wanted high (grade) schools cut last (Rhode Island, 106). Of note in the Brickell data was the finding that Rhode Island clergymen were more supportive of secondary schools than they were of elementary schools (i.e., wanted grade schools closed first and high schools eliminated last) Rhode Island, 105-106). If this pattern is true elsewhere, the solving of emergent financial woes within the Catholic sector could be a rather volatile undertaking (i.e., an elementary-oriented laity vs. a secondary-oriented clergy).

11. This item was also included in Belleville and Rhode Island, but responses in these studies were not broken down according to income level. As such, they are irrelevant at this particular point in the text.

12. Hillsborough County is an exception to the rule in this regard. The citizenry had recently voted down 5 consecutive bond issues, thus prohibiting the construction of additional public school facilities and necessitating double session attendance. In addition, local school officials had yielded to federal directives to desegregate shortly prior to the Notre Dame survey. The Hillsborough County response, then, might be viewed as a reaction to overcrowding and integration in the public sector.

13. See, for example, U. S. Department of Commerce, County and City Data Book — 1967 (Washington, D.C.: U. S. Government Printing Office, 1967). Median family incomes for counties and standard metropolitan statistical areas in 1959-60 were consistently higher than median incomes for urban places within those counties and S.M.S.A.'s. See also U.S. Bureau of the Census, Statistical Abstract of the United States — 1970, 91st edition (Washington, D. C.: U. S. Government Printing Office, 1970), p. 330. In 1960 and 1969 the proportion of families below federally defined poverty lines was lower in non-metropolitan, than in metropolitan areas.

14. Conclusions regarding the distribution of demand for Catholic education are based exclusively upon the findings of 5 studies (Indianapolis, Dubuque, St. Louis, Hillsborough County, and Montgomery) in which responses were cross tabulated with 2 key social variables, area of residence and income. These correlates have been incorporated into other analyses, but not in any systematic way. Brickell, for instance, presented his Rhode Island sample with the following item: "When a Catholic with young children is buying a home, one of the things he should seriously consider is whether or not the parish has an elementary school." One-third (33.3 percent) of the sample registered disagreement, and Brickell casually notes that most of these were high income respondents. (Rhode Island, 102). The Rhode Island questionnaire also included this statement. "Every Catholic child should spend some time in a Catholic school." Again, the author makes mention of the fact that, of those who responded negatively, the bulk were from high income brackets (Rhode Island, 102). Hanlon and DeRoche, in attempting to assess the amount of support for Catholic secondary education in Marquette, reported that only 6 of their 28 categories--primarily lower income groups--exhibited

favorable response rates of 60 percent or more (Marquette, 17). These data, then corroborate our findings of a wanting demand for parochial schools among more affluent Catholics. The quantitative evidence which they contain, however, is not presented in detailed fashion; hence, their exclusion from the report proper.

Response breakdowns by correlates other than area of residence and income would have certainly enhanced the validity of the conclusions reached herein. Again, however, the secondary analyst must work with what has already been done. With respect to analyses of attitudes toward Catholic education along various social dimensions this amounts to precious little. Donovan and Madaus controlled for educational attainment and age in their study of Boston and found little internal variation. When asked to cite the 2 or 3 apostolic activities worthy of the most church support, Catholic respondents of all educational backgrounds mentioned parochial elementary schools more frequently than parochial high schools, and CCD programs and various social action projects more often than either of these (the reader will recall that the list of priorities established via analysis of marginal totals saw Catholic elementary schools ranked fourth and Catholic high schools ninth). All age groups assigned to Catholic high schools a lowly place on their list of priorities, however, support for parochial elementary schools seemed to vary slightly with the age of the respondent (i.e., a direct variation between strength of support and age) (Boston, 88-89). According to Hanlon and De Roche, the lower income Marquette respondents who endorsed Catholic secondary education so highly also tended to be among the least educated (Marquette, 17). Dubuque researchers presented respondents with these two statements: "The need for Christian education is as great today as it was in the past," and "However hard it is to define, Catholic schools have a unique and desirable quality that is not found in public schools." A slight, but discernible, direct relationship between acceptance of parochial schools (i.e., responses in agreement or strong agreement) and the age of respondents is evident in the distribution of responses for each item (Dubuque, Tables 12 and 34). One might be tempted to draw inferences from the above commentary (e.g., a fading demand for parochial school among younger, better educated Catholics), and then link such inferences to those already drawn (e.g., a declining demand for parochial schools among younger, better educated, more affluent Catholics living in suburban areas). Such a procedure would be highly questionable, however. The authors prefer to limit themselves to those data cited in the text on grounds of completeness and relevance to this review. Further discussion of the distribution of demand for Catholic education awaits advances in both the quantity and quality of empirical work being done.

15. The Denver and Savannah samples included parents of both Catholic and public school students (the latter being selected from C C D enrollment lists and parish membership rolls). Most of the parents were Catholic, however, mixed marriages and cases of non-Catholic couples enrolling their children in parochial schools did introduce respondents of other denominations into the sample. Non-Catholics were especially evident in Savannah where Catholic school enrollment represented one way of avoiding forced integration of public schools.

16. Sample items from each category are presented below:

Religious.	"Catholic/Public are more likely to teach children to practice their religion."
Academic.	"Catholic/Public schools are more likely to teach children to read and write well."
Social.	"Catholic/Public schools are more likely to make children good citizens of the United States."
Personal.	"Catholic/Public schools are more likely to train children to be honest, truthful and moral."
School Operation	"Catholic/Public schools have more effective and qualified teachers."
Practical.	"Catholic/Public schools are more likely to train children for good jobs."

These categories were originally developed during the nationwide Notre Dame study of Catholic schools (ongoing from 1962 through 1966) in which 31 individual items were utilized. The list of items was expanded to 36 for use in Denver and Savannah, and reduced to 14 for research in St. Louis, Montgomery, and Hillsborough County. For a listing of the original items and an explanation of the categorization scheme see

Neuwien, Reginald A. (ed.). Catholic Schools in Action (Notre Dame, Indiana: University of Notre Dame Press, 1966), 257-283.

17. Although the topic will come up later, it deserves some preliminary treatment at this point. Briefly, decision-making involves a choice between 2 or more alternatives. Often, the process can become quite arduous, particularly if the advantages and disadvantages accompanying the selection of various alternatives are quite comparable. Festinger and others have described this type of pre-decisional dilemma as a state of dissonance. The ultimate choosing or making of a decision, however, does not result in the elimination of all traces of uneasiness or tension. Rather, a post-decisional variety of dissonance may set in; for while the advantages of the chosen alternative have been gained, the assets of the alternative(s) not chosen have been lost. In addition, the disadvantages of the former must yet be overcome, while the liabilities of the latter have been avoided. Research by Festinger and his associates has demonstrated that dissonant decision makers do attempt to reduce their anxiety. Such attempts generally consist of an alteration of cognitions such that the relative attractiveness of the chosen, as compared to the unchosen, alternative(s) is increased. So it may be with the parent who must decide between a parochial and a public education for his children. Dissonance may both precede and follow the exercise of educational choice. That which follows may often be reduced via the cognitive alterations observed by Festinger. In Denver, then, those parents who patronized public schools tended to perceive them as academically superior, while patrons of Catholic education were more likely to so perceive parochial schools. Research suggests that patronization may precede and affect assessment of academic excellence. For a brief discussion of Festinger's theory of post-decisional dissonance, and an abbreviated enumeration of related research, see Deutsch, Morton, and Krauss, Robert M. Theories in Social Psychology (New York: Basic Books, Inc., 1965), 70-71.

18. Ironically, respondents in Fall River and Boston displayed precisely this social awareness and humanitarian concern, yet rejected conventional parachial schools as institutions worthy of extensive Church support (see Section A). Apparently, Denver respondents look upon Catholic schools as institutional vehicles capable of continuously generating this type of awareness and concern; whereas, those in Fall River and Boston favor social action of a more immediate and grandiose nature, even if this means the utilization of funds otherwise earmarked for diocesan schools and the subsequent adoption of CCD-oriented religious education format.

19. Again, the Fall River sample included both Catholics and non-Catholics.

20. "Notre Dame" classification of items employed in non-Notre Dame studies is strictly arbitrary. The authors realize that such items (as well as items utilized in studies conducted by Notre Dame researchers) might be classified in any number of ways. Differences of opinion on this point, then are well taken, and indeed expected.

21. The intricacy of these perceptions was also evident in Denver, Savannah, Fall River, and Belleville, but perhaps not as vividly as in Lincoln.

22. One item, "Guidance and counseling services" (Social), evoked the following response: "Catholic" - 30 percent, "Public" - 30 percent, "No difference" - 40 percent. As such, it was included in both tables. Insofar as the item sheds no light upon the differential perception of parochial and public schools, it has been deleted from the tables as they appear in the text of this report. The 30-30-40 distribution of responses, however, is illustrative of the complicatedness suggested by the Lincoln data (i.e., a split response to an item which drew emphatic support for Catholic schools in Denver, Savannah, and Fall River).

23. As in Belleville, no religious items were included.

24. Again the Boston sample like that in Fall River, included non-Catholic.

25. The original Boston manuscript contained 2 separate columns, "About the same" and "Not sure". They have been collapsed into a single column, however, for purposes of this review.

26. Assuming that Catholic respondents were more likely to have enrolled their children in parochial schools, and non-Catholic respondents more likely to have utilized public educational facilities, variations in response by religious affiliation may be indicative of the post-decisional dissonance suggested in Denver and briefly discussed in footnote 17. That is, patronization of one school system or the other (Catholic or public) may have affected perceptions of educational distinctiveness or excellence in Boston (respondents may have tended to look more favorably upon those schools in which their children were enrolled).

27. One might expect perceptions of educational distinctiveness to reflect the differentials in quality-based demand discussed in section A (i.e., decreasing demand as one moves from city to suburb, and from low and medium income to high income brackets). In short, it might be conjectured that as one moves outward (geographically) and upward (economically) the extent and intensity of support mustered for public education on select items increases. Data from Indianapolis and Boston are supportive of this contention.

Elford's Indianapolis-Evansville-Louisville report includes the percentagized table shown on page 132 (Indianapolis, 47). Quite obviously, support for Catholic school functioning in developing independent thinking on the part of the student (personal) dwindles as income rises. Among the more educated, affluent public schools were attributed outright superiority in this area of educational performance (the above data also tend to support the hypothesized inverse relationship between level of educational attainment and demand for Catholic education alluded to in footnote 14). Thus, a "Personal" item, on which parochial schools are generally thought of as "better", elicited support for public schools in direct proportion to income level (and in inverse proportion to level of educational attainment).

The Elford report contains a similar table which appears on page 133 (Indianapolis, 49). The response pattern discernible in the preceding table is even more pronounced above. Support for Catholic school performance in providing for slow learners (school operation) varies inversely with level of income. This inverse relationship is especially obvious among better educated respondents (again, the data tend to confirm the hypothesized inverse relationship between educational attainment and demand for Catholic schools). In this case, then a "School Operation" item, on which public schools are generally perceived as superior, elicited the same brand of support for public education observed earlier--directly proportionate to income level (and inversely proportionate to level of educational attainment).

The 1969 revised edition of the Indianapolis report includes the percentagized breakdown of responses appearing on page 134 (Indianapolis revised, Table 4).

Lay Respondents* by Income-Education Rating Catholic or Public Schools Better in Teaching Students to Think for Themselves

	Income													
	$3,000 - 4,999		$5,000 - 6,999		$7,000 - 8,999		$9,000 - 11,999		$12,000 - 14,999		$15,000 - 24,999		$25,000 or over	
Education	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.
Elem. School	23	6	18	8	18	6	13	11	22	11	23	11	27	17
Some High School	26	8	18	8	18	9	19	9	17	12	16	13	16	16
High School Grad.	18	12	16	11	15	12	15	14	14	16	8	17	12	19
Some College	17	17	15	18	14	19	12	19	12	21	11	24	6	31
College Grad.	6	22	10	38	9	27	9	22	7	26	8	28	6	29
Master's Degree	0	43	10	38	7	32	11	25	3	35	6	36	10	37
Doctoral Degree	12	29	11	13	8	20	10	30	3	47	11	29	6	25

*Includes only those respondents expressing a preference ("Catholic" vs. "Public").

Lay Respondents* by Income - Education Rating Catholic or Public Schools Better in Making Provisions for Slow Learners

	Income													
	$3,000 - 4,999		$5,000 - 6,999		$7,000 - 8,999		$9,000 - 11,000		$12,000 - 14,999		$15,000 - 24,999		$25,000 or over	
Education	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.	Cath.	Pub.
Elem. School	23	22	21	28	19	29	15	46	19	36	10	58	17	37
Some High School	23	26	20	31	18	37	18	41	18	40	16	39	16	45
High School Grad.	20	31	17	38	15	46	14	48	13	51	10	53	5	57
Some College	16	46	14	46	13	50	10	56	10	62	8	64	5	67
College Grad.	10	56	6	70	5	66	7	68	4	73	4	75	5	71
Master's Degree	0	79	5	74	7	67	5	72	2	81	4	78	6	69
Doctoral Degree	0	61	13	31	15	40	7	51	4	78	5	64	2	77

*Includes only those respondents expressing a preference ("Catholic" vs. "Public").

Comparison Between Catholic and Public Schools
Rating Schools as Better On Selected Items

	Inner City Lay			Suburban Lay		
	Pub.	Cath.	No. Diff.	Pub.	Cath.	No. Diff.
Physical Education Programs (School Operation)*	46	9	24	74	3	14
Provisions for Slow Learners (School Operation)	32	32	17	63	8	17
Preparation for a Job (Practical)	23	27	40	42	7	44
Physical Condition of the School Building (School Operation)	29	18	39	47	8	39
Guidance and Counseling Services (Social)	15	51	21	44	20	23
Preparation for College (School Operation)	9	38	40	38	16	39
Developing Creativity and Imagination (Academic)	12	30	43	32	7	51
Teaching Students to Think for Themselves (Personal)	7	39	46	22	11	59
Developing Interest and Eagerness for Learning (Academic)	1	43	45	17	15	61

*"Notre Dame" classification of items added.

Among inner city lay Catholics expressing a preference ("Catholic" vs. "Public"), 6 of the 9 items evoked response distributions favorable to Catholic school functioning (5 of them academic, school operational, or practical in nature). Two (2) items elicited overall responses supportive of public education, while 1 exhibits response rates equally in favor of parochial and public schools. Suburban laymen, on the other hand, favor (in most cases, overwhelmingly) public education on all 9 items. Support for Catholic schools on selected items, then, appears to vary inversely with distance from the central city, as well as with income level. The Indianapolis revised report, just as its 1968 predecessor, also throws support to the hypothesized inverse relationship between level of educational attainment and demand for Catholic education. Among college student respondents, for example, public schools were favored on 8 of the 9 items. Such a finding would, in addition, tend to confirm a possible direct relationship between age and demand for Catholic schools (again, refer to footnote 14).

Boston data corroborate information obtained in Indianapolis, Evansville, and Louisville. Comparisons of Catholic and public schools on selected items by residence and religion, for example, yielded the following percentagized breakdowns. Among Catholics (Boston, 159):

	Boston			Outside Boston		
	Cath. Better	Pub. Better	Same or Not Sure	Cath. Better	Public Better	Same or Not Sure
Guidance and counseling services (Social) *	36	21	43	24	28	48
Developing good citizenship (Social)	36	12	52	28	14	58
Developing sympathy for the problems and views of Negros (Social)	30	11	58	25	12	62
Preparation for College (School Operation)	47	15	38	34	21	43

	Boston			Outside Boston		
	Cath. Better	Public Better	Same or Not sure	Cath. Better	Public Better	Same or Not sure
Preparation for marriage and family life (Social)	58	8	34	57	8	35
Preparation for a job (Practical	22	32	46	15	35	48
Teaching students to think for themselves (Personal)	29	26	45	19	28	52
Physical condition of the school buildings (School Oper.)	51	11	37	24	28	46
Classroom discipline (Personal)	81	2	17	74	3	23
Teaching children right from wrong (Religious)	61	3	36	57	3	39
Teaching children to get along with other children (Social)	30	13	57	26	14	59
Offering a wide range of courses (School Oper.)	15	48	37	8	56	35
Having high quality teachers (School Operation)	39	18	43	25	28	47

*"Notre Dame" classification of items added.

Among non-Catholics (Boston, 159):

	Boston			Outside Boston		
	Cath. Better	Public Better	Same or Not sure	Cath. Better	Public Better	Same or Not sure
Guidance and counseling services (Social)*	29	21	51	14	28	58
Developing good citizenship (Social)	24	15	61	10	24	65
Developing sympathy for the problems and views of Negros (Social)	13	24	63	8	20	71
Preparation for college (School Operation)	26	23	51	16	31	51
Preparation for marriage and family life (Social)	36	14	51	26	20	54
Preparation for a job (Practical)	10	35	54	4	39	55
Teaching students to think for themselves (Personal)	14	36	49	5	46	49
Physical condition of the school buildings (School Oper.)	37	12	50	17	24	58
Classroom discipline (Personal)	63	7	30	59	7	34
Teaching children right from wrong (Religious)	35	7	56	30	11	61

	Boston			Outside Boston		
	Cath. Better	Public Better	Same or Not sure	Cath. Better	Public Better	Same or Not sure
Teaching children to get along with other children (Social)	18	21	60	10	28	61
Offering a wide range of courses (School Operation)	8	44	49	2	59	39
Having high quality teachers (School Operation)	21	23	56	11	39	51

*"Notre Dame" classification of items added.

Among urban ("Boston") Catholics, parochial schools were clearly preferred on 11 of the 13 items. Suburban ("Outside Boston") Catholics, on the other hand, favored Catholic schools on only 7 items. Non-Catholics, while registering less overall support for parochial schools (as might be expected), furnished a similar distribution of responses by residence. Among urban respondents of other-than-Catholic religious affiliation, parochial schools were preferred on 7 items. Their suburban counterparts were in favor of Catholic schools on but 3 of the 11 items. Within both the Catholic and non-Catholic sub-samples, then, preference for parochial schools was most pronounced among those living in Boston proper, and least evident among residents of the suburban fringe. As in Indianapolis, support for Catholic schools on selected items appears to vary inversely with distance from the inner city.

Boston data on comparisons of Catholic and public schools on selected items by level of education and religion yielded the percentagized breakdowns reprinted below. Among Catholics (Boston, 162):

	Less than High School Graduate			High School Grad. or Some College			College Graduate or More		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Sam
Guidance & Counseling Service (Social)*	33	16	32**	27	27	33	17	44	24

	Less than High School Graduate			High School Grad. or Some College			College Graduate or More		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same
Developing good citizenship (Social)	32	11	42	28	14	49	33	16	40
Dev. sympathy for the problems and views of Negros (Social)	24	7	35	28	11	40	22	21	36
Prep. for college (School Oper.)	35	15	30	40	20	30	27	29	31
Prep. for marriage and family life (Social)	54	5	24	60	8	20	47	12	24
Prep. for a job (Practical)	20	25	37	17	36	38	10	43	35
Teaching students to think for themselves (Personal)	30	16	38	19	30	39	15	39	33
Phys. cond. of school buildings (School Oper.)	32	16	34	30	26	31	25	34	28
Classroom discipline (Personal)	70	3	15	79	3	10	70	5	13
Teaching children right from wrong (Religious)	57	2	29	59	3	31	54	7	29
Teaching children to get along with other children (Social)	33	9	42	26	12	53	18	27	44

	Less than High School Graduate			High School Grad. or Some College			College Graduate or More		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same
Offering a wide range of courses (School Oper.)	17	38	27	9	57	22	2	74	12
Having high quality teachers (School Oper.)	37	18	29	28	25	35	14	42	29

*"Notre Dame" classification of items added.
**"Not Sure" responses omitted.

Among non-Catholics (Boston, 162):

	Less than High School Graduate			High School Grad. or Some College			College Graduate or More		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same
Guidance and counseling services (Social)*	21	20	28**	19	25	26	13	34	23
Developing good citizenship (Social)	13	18	43	14	21	42	12	27	41
Dev. sympathy for the problems and views of Negros (Social)	9	15	36	10	20	33	8	27	36
Prep. for college (School Oper.)	18	24	33	21	27	28	13	39	28
Prep. for marriage and family life (Social)	27	13	26	29	17	26	28	26	22

	Less than High School Graduate			High School Grad. or Some College			College Graduate or More		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same
Prep. for a job (Practical)	5	27	41	7	38	31	4	48	28
Teaching students to think for themselves (Personal)	9	30	32	8	43	26	1	57	24
Phys. condition of the school buildings (School Operation)	27	17	25	22	18	31	17	30	30
Classroom discipline (Personal)	61	2	16	59	8	11	60	7	11
Teaching children right from wrong (Religious)	37	4	38	30	9	37	30	16	29
Teaching children to get along with other children (Social)	18	15	41	11	26	41	7	37	35
Offering a wide range of courses (School Oper.)	4	43	24	4	54	17	4	67	12
Having high quality teachers (School Oper.)	18	24	30	13	33	29	8	48	24

*"Notre Dame" classification of items added.
**"Not sure" responses omitted.

Among both Catholics and non-Catholics, support for Catholic education on selected items varies inversely with level of educational attainment. Catholics with less than a completed high school education favor parochial schools on 11 of the 13 items. Those with a high school diploma and possibly some college credit are supportive of Catholic schools on 9 items, while Catholic respondents with a college degree or more are in favor of Catholic education in only 5 functional areas. Just as in the residential breakdown, non-Catholics expressed less overall support for parochial schools, but provided a distribution of responses similar to that of their Catholic cohorts. Those without high school diplomas supported Catholic schools on 5 items, while the 2 remaining groups each preferred such schools on but 3 of the total 13. Perhaps the skepticism regarding the relationship between educational attainment and demand for Catholic schools (as expressed in footnote 14) is somewhat unfounded.

Donovan and Madaus also provide the percentagized comparisons of Catholic and public schools on selected items by age and religion as shown on the following pages (143-146).

While there were no significant differences in support for parochial schools between the various non-Catholic age groups (the "Under 30," "30-39," "40-54," and "55+" groups favored Catholic schools on 3,4,3, and 3 items respectively), the relationship between support for Catholic education on selected items and age among Catholic respondents was definitely a direct one (supporting the implications somewhat warily drawn in footnote 14). Catholics under 30, as well as those 30-39 years of age, favored parochial schools on 7 items. Catholics in the 40-54 age bracket preferred Catholic schools on 9 items, while those 55 years of age and older were supportive of such schools on 11 of the total 13.

On the basis of Indianapolis and Boston data, then the expectations expressed at the outset of this footnote appear to be quite sound. Support for Catholic schools on selected items does apparently vary inversely with both income level and distance from the central city (as well as inversely with level of educational attainment, and directly with age). Findings pertinent to demand for Catholic education based upon perceived comparative quality (section A) do seem to coincide with in-depth data on perceptions of educational distinctiveness (section B).

For Catholics (Boston: 161):

	Under 30			30-39			40-54			55+		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same
Guidance and counseling services (Social)	27	32	29**	25	29	24	22	28	33	33	15	37
Dev. good citizenship (Social)	27	14	47	25	17	43	30	15	44	34	7	47
Dev. sympathy for the problems and views of Negroes (Social)	32	12	35	23	14	37	26	11	37	22	7	43
Prep. for college (School Operation)	40	18	31	37	23	24	37	21	29	32	17	36
Prep. for marriage and family life (Soc.)	58	10	20	52	7	21	56	8	21	58	6	22
Preparation for a job (Practical)	14	37	38	13	37	35	18	37	32	21	23	42
Teaching students to think for themselves (Personal)	18	36	34	19	31	35	19	29	39	30	13	42

For Catholics (Boston, 161) (continued):

	Under 30			30-39			40-54			55+		
	Cath. Better	Pub. Better	Same	Cath. Better	Pub. Better	Same	Cath. Better	Pub. Better	Same	Cath. Better	Pub. Better	Same
Physical condition of the school buildings (School Operation)	34	22	30	26	30	26	28	26	32	30	20	35
Classroom discipline (Personal)	80	1	9	72	5	11	75	4	12	70	1	14
Teaching children right from wrong (Rel.)	59	2	28	53	4	33	58	4	30	59	2	29
Teaching children to get along with other children (Social)	25	14	50	21	15	50	25	13	51	34	12	42
Offering a wide range of courses (School Operation)	9	60	18	6	58	18	9	60	20	15	36	32
Having high quality teachers (School Operation	26	30	29	25	30	30	28	26	32	32	15	37

*"Notre Dame" classification of items added.
**"Not Sure" responses omitted.

For non-Catholics (Boston, 161):

	Under 30			30-39			40-54			55+		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same
Guidance and counseling services (Social)	24	28	25**	16	25	19	14	29	30	17	21	26
Dev. good citizenship (Social)	19	24	38	16	23	33	9	20	48	9	18	43
Dev. sympathy for the problems and views of Negroes (Social)	12	29	34	11	23	29	8	17	37	5	14	34
Prep. for college (School Operation)	24	34	24	18	27	26	19	29	31	12	25	32
Prep. for marriage and family life (Soc.)	27	28	26	32	17	21	29	17	28	23	12	24
Preparation for a job (Practical	8	46	28	4	39	27	5	37	37	6	28	34
Teaching students to think for themselves (Personal)	10	53	21	7	39	25	4	44	32	6	35	25

For non-Catholics (Boston, 161) (continued):

	Under 30			30-39			40-54			55+		
	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same	Cath. Better	Public Better	Same
Physical condition of the school buildings (School Operation)	29	24	26	21	19	28	21	22	32	16	17	28
Classroom discipline (Personal)	66	8	9	58	6	10	61	8	13	49	4	14
Teaching children right from wrong (Religious)	41	11	28	30	10	33	26	9	42	27	8	33
Teaching children to get along with other children (Social)	15	30	38	8	25	39	10	25	43	13	23	32
Offering a wide range of courses (School Operation)	7	61	12	2	52	17	4	56	20	2	47	17
Having high quality teachers (School Operation)	14	41	26	13	33	26	11	36	29	13	26	26

*"Notre Dame" classification of items adde.
**"Not sure" responses omitted.

28. Insofar as respondents were reacting to these 11 items as parents of children in parochial schools, it seems safe to assume that responses submitted were of a highly personal nature. In other words, it seems reasonable to assume that respondents interpreted each item in the following manner: "Would this cause you to remove your children from Catholic schools."

29. Similar assumptions might be made with respect to public school patrons who must certainly hope that moral, social, and personal training are part of the educational regimen undergone by their children.

30. The perceived parental obligation, or moral imperative, to patronize Catholic schools will be discussed in greater detail later in a later footnote.

31. For a breakdown of the above Indianapolis data by urban/suburban see the 1969 revised rendition of Elford's initial (1968) report (Tables 1 and 5).

32. One factor which has been ignored in the text, but which deserves at least footnote treatment, is the perceived parental obligation, or the assumed moral imperative, to enroll one's children in parochial schools. Is this factor still a viable one in 1971? Is it capable of overriding all other considerations (e.g., a parent may place a high price tag upon preparation for college, may perceive public schools as better suited to affect such preparation, but elect to enroll his children in parochial schools in lieu of his perceived moral obligation to do so)? Several studies have attempted to assess the pervasiveness of this perceived imperative. Elford, for example, exposed his respondents to the following item: "Many priests consider parents sending children to public schools less loyal to the parish." Forty-eight (48) percent of his Indianapolis, Evansville, and Louisville respondents agreed with the statement, while 20 percent expressed their disagreement (Indianapolis, 67). Elford also employed the following item: "In parishes with schools public school children are treated as second class citizens." Thirty-six (36) percent agreed, and an equal proportion (36 percent) objected. Thus, while pressure is apparently exerted, it does not appear to be of the same intensity as one might have expected several years ago.

Brickell found that only about one-third of his Rhode Island lay sample felt pressured to enroll their children in parochial schools (in response to the following item: "Many priests consider parents who send their children to public schools as being less loyal to the parish than parents who enroll their children in parochial schools.") (Rhode Island, 103). Belleville researchers utilized one of the items employed earlier by Elford ("Catholic children who attend public schools tend to be treated as second class citizens of the parish if there is a parish school.") and obtained the following distribution of responses (Belleville, 16):

Agree Strongly	8 percent
Agree	27 percent
Are Undecided	28 percent
Disagree	31 percent
Disagree Strongly	6 percent

Rhode Island and Belleville data, then, tend to confirm conclusions drawn via an analysis of Indianapolis findings. Official church pressure upon parents to enroll their children in Catholic schools is minimal to the point of being inconsequential. This may well be a part of the increased social sensitivity and organizational flexibility characteristic of the post-Vatican II Church (and referred to in section A while discussing some responses obtained in Fall River and Boston).

33. This section represents an encroachment into an area that is traditionally the lair of economists and demographers. Some projections are possible, however, on the basis of attitudinal data reviewed herein.

34. It would be most tempting to simply arrange in chronological order the 20 studies upon which this report is based (see Appendix B) and draw appropriate inferences. One might also be inclined to compare the data of these more recent studies with those obtained via a pair of national surveys completed in the mid 1960's (see Greeley, Andrew M., and Rossi, Peter H. The Education of Catholic Americans. Garden City, New York: Doubleday, 1966; and Neuwien, Reginald A. ed. Catholic Schools in Action. Notre Dame, Indiana: University of Notre Dame Press, 1966). The dissimilarity of sampling procedures, instruments, techniques of data analysis, etc. dictates against such temptations and inclinations, however.

35. See Norval D. Glenn and Ruth Hyland, "Religious Preference and Worldly Success: Some Evidence From National Surveys," American Sociological Review, 32(1967): 73-85. In all, 18 surveys conducted from 1943 to 1963 were reviewed.

36. Ibid., 75. See Table 1.

37. Ibid., 75-76. See Table 2.

38. Ibid., 76. See Table 3.

39. Ibid., 79. See Table 8.

40. Ibid., 76. Greeley and Rossi concur. See Greeley and Rossi, 144-164.

41. Both diocesan and Glenn and Hyland data take into account educational and income levels. The Glenn and Hyland article does not include breakdowns by area of residence, but one can assume that the increasingly common well educated, relatively affluent, white collar Catholics of whom they speak are well represented in diocesan suburbs where the demand for Catholic education was shown to be low. Age was also omitted from the studies reviewed by Glenn and Hyland. Insofar as the entire American population is becoming more youthful, (Median ages in years for the United States and Puerto Rico for 1950 and 1960 were 30.7 and 29.6 respectively. The estimated median age in years as of July 1, 1968 was 28.8. See United States Bureau of the Census, Statistical Abstracts of the United States 1969. (90th edition.) Washington, D. C., 1969.) however, the Catholic segment might be expected to reflect this trend (and thus consist of an increasingly larger number of faithful from those age categories wherein the demand for Catholic schools is least intense).

42. Mention of the perceived reference group norms through which attitudes are apparently "filtered" (see the Introduction) seems appropo here. Perhaps there is a note of conformity to the standards of new "significant others" in the acquisition, by upwardly mobile Catholics, of public school-oriented educational tastes and preferences. Attitudes toward Catholic schools may well undergo considerable transformation in a setting where attendance at such schools is not fashionable.

43. In a sense, parochial schools might be looked upon as the architects of their own demise. Originally functional as agents of cultural transmission and assimilation, in addition to their role as protectors of the faith, they have apparently been successful to the point of placing their continued existence in jeopardy, of putting themselves "out of business" so to speak. An essentially immigrant Catholic population has been "Americanized" and "middle classicized" in shortly more than a century. Tastes

and preferences have been altered, and priorities, reworked such that the institutions largely responsible for this new found good fortune have been more or less discarded.

44. Diocesan studies in Montgomery, Hillsborough County, Des Moines, Boston, and Fall River also contain breakdowns by "use" supportive of preliminary projections.

45. One is reminded of Thomas' oft cited enjoinder: "If men define situations as real, they are real in their consequences." See Thomas, W. I. and Ynaniecki, Florian. The Polish Peasant in Europe and America (Chicago: University of Chicago Press, 1918), 81.

IV. SUMMARY AND CONCLUSIONS

Summary. Data reviewed in sections A, B, and C of Chapter III indicate that:

(1) American Catholics, while recognizing the role of the parent as a religious educator, do want their children to receive some formal religious instruction as well (III-A).

(2) Lay opinion varies, however, as to the context within which such instruction should be dispensed (III-A).

(3) While conventional parochial schools receive considerable support, Catholic laymen also display a willingness to utilize other-than-traditional formats (e.g., public school attendance supplemented by CCD instruction) (III-A).

(4) Nearly all Catholics, regardless of age, level of educational attainment, income, or area of residence are cognizant of the distinctiveness of both parochial and public schools. In other words, they are aware that the two types of schools differ from one another (III-A).

(5) Moreover, they are able to identify those traits contributive to the distinctiveness of each. Generally, parochial schools are perceived as superior in the areas of religious instruction, and personal and social development. Public schools, on the other hand, are attributed primacy in academic offerings, operational efficiency, and practicality and convenience. This differential imputation of functional superiority is characteristic of all age, educational, income, and residential sub-samples (III-B).

(6) Imputations of Catholic school superiority on religious, personal and social items tend to be more emphatic than similar imputations of public school superiority on academic, school operational, and practical items. Apparently, while both parochial and public schools enjoy a certain perceived singularity, those properties peculiar to the former are somewhat more obvious (III-B).

(7) While there exists an overall consensus as to the distinctive offerings of both parochial and public schools, there remains considerable variance in assessments of the relative quality of these schools. In general, younger, better educated, upper income, suburban lay respondents favor public institutions, while their older, less educated, middle to lower income, urban counterparts are supportive of Catholic schools (III-B).

(8) Quality assessments of educational programs, and subsequent decisions as to where to enroll one's children (the exercise of educational choice), appear to be simply a function of one's personal set of education-related priorities (e.g., one who values, above all else, religious, personal, and social growth will likely gravitate toward the Catholic sector where such growth is allegedly better fostered; conversely, one who places a higher relative price tag upon academic excellence, operational efficiency, and overall practicality will tend to patronize public education) (III-B).

(9) Educational priorities seem to vary significantly with lifestyle and the determinants thereof (e.g., age, education, income, area of residence). In other words, young, well-educated, affluent, suburban respondents employ different criteria of school quality than their older, less educated, lower income, urban cohorts. Most often, the former define "better" in terms of academic, school operational, and practical advantages (educational programs which are outstanding on these items are thought to be better overall), while the latter define it in terms of religious, personal, and social assets (educational programs which are particularly strong in these areas are credited with general superiority). These lifestyle-related differences in personal priorities help to explain the variation (by age, education, income, and residence) in quality-based demand for Catholic education noted above (#7) (III-B).

(10) Priority-based variations in the demand for Catholic education are accentuated by the presence of impressive public school plants in suburban areas and the corresponding absence of such in the inner city (III-A and C).

(11) Insofar as American Catholics are beginning to occupy, at an increasing rate, those social categories in which the demand for parochial schools is least emphatic (young, well educated, middle to upper income, suburban), and insofar as they are taking on the educational tastes and preferences (priorities) characteristic of public school-oriented incumbant occupants (academic excellence, operational efficiency, and general practicality as the most important criteria in quality assessments of educational programs), a continued decrease in the demand for Catholic education is projected (III-C).

(12) Insofar as attitudes toward Catholic education are complex phenomena, variations in the above patterns are not uncommon (III-A, B, and C).

Conclusions. The overarching objective of this review was to furnish the reader with a working knowledge of lay attitudes toward Catholic elementary and secondary education (see the Introduction). It was stated that such knowledge might eventually enhance our understanding of the parental exercise of educational choice, and perhaps enable us to predict and even influence that exercise. Hopefully, the foundations of an expanded comprehension were laid in sections A and B of Chapter II, while some predictive insights were provided in section C of the same chapter. Influence implies policy, however, and the descriptive nature of the present report, along with the scarcity of adequate data reviewed herein, places the mapping of a strategy for Catholic education beyond the preview of this analysis. Some general policy-related observations are offered, however:

(1) Diocesan, and Glenn and Hyland data indicate that Catholic education is encountering, and will continue to encounter, a diminishing lay demand (as gleaned from responses to attitudinal survey items) for the services it renders.

(2) Insofar as attitudes are contributive to subsequent behavior (in this case, insofar as education-related attitudes contribute to the subsequent parental selection of educational alternatives), two courses of action recommend themselves for consideration by parochial school officials: (a) attempt to change lay attitudes, or (b) modify the object of those attitudes--Catholic education itself--to more closely coincide with the educational tastes and preferences (priorities) of an upwardly mobile lay clientele.

(3) In lieu of the magnitude of the problem (as outlined in #1) and the difficulties to be confronted in any effort to alter collectively held attitudes,[1] option (b) appears to be the more feasible and expedient.

(4) Hopefully, this report has supplied some insights into the current educational tastes and preferences (priorities) of American Catholics.

---

[1] For an easily digestable discussion of the multi-dimensionality of attitudinal change see Krech, David, Crutchfield, Richard S., and Ballachey, Egerton L. Individual In Society (New York· McGraw-Hill, 1962), 215-269.

II. ENROLLMENT IN NONPUBLIC SCHOOLS

Kenneth M. Brown

CONTENTS

I. Analysis of Trends in Enrollment 157

II. Conclusions 183

III. Forecasts of Enrollment 185

IV. Conclusions 209

I. ANALYSIS OF TRENDS IN ENROLLMENT

Introduction

This study analyzes recent changes in enrollment in nonpublic schools. It deals mostly with the Catholic schools, since it is they that have suffered large losses of students in recent years, while the non-Catholic schools have been relatively stable. Also, the Catholic schools enroll about 83 percent of the nonpublic students.

The Catholic schools in 1970 had 4,367,774 students, and the other nonpublic schools enrolled 914,800, together comprising slightly more than 10 percent of the total. But Catholic enrollment has declined by 16 percent in the past three years, and the decline shows every indication of continuing. In this section the reasons for this are examined, and finally the question is raised as to whether state aid would have a significant effect on enrollment. In the second main section, nonpublic enrollment is forecast, state by state, for 1975 and 1980.

The Location of Nonpublic Schools

What factors explain the state-by-state location of private schools? In other words, what determines the proportion of students in a state that enroll in private schools? A simple regression equation provides a partial explanation as well as some insight into the current problems of the schools. Consider the following variables for each state:

NP: Nonpublic enrollment as a percent of total enrollment, primary and secondary, 1968.

DEN: Density of population, in population per square mile, 1968.

CATH: Catholics as a percent of population, 1968.

GRO: The 1960-69 growth rate of population.

Taking logarithms to the base ten, with 51 observations (50 states and the District of Columbia) the following equation was estimated:

$$\log NP = \underset{(-3.37)}{-0.832} + \underset{(9.46)}{0.480} \log CATH + \underset{(7.55)}{0.265} \log DEN + \underset{(1.83)}{0.125} \log GRO$$

$R^2 = .78$; t-values are in parentheses.

Much of the regional variation in nonpublic school enrollment is explained by the location of Catholics, who tend to live in urban areas and in the Northeast.

The significant positive coefficient of population density shows that densely populated states tend to have a relatively large proportion of their total enrollment in private schools. This is consistent with traditional location theory. Firms with transportation costs find that their average costs (including transportation) are lower in densely populated areas, where transportation costs per customer are lower. Firms with sufficiently high fixed costs will find that some areas are too sparsely populated for profitable operation, no matter what price they charge. Private schools are in precisely this situation: (a) transportation costs (measured in money and time) are significant factors, and (b) small schools, with small classes, have high per pupil costs. Therefore, private schools tend to locate in the more densely populated states.

Th[illegible]able NP is not "explained" in a causal sense by a state's growth rate. Nevertheless, this variable was included in the equation to demonstrate the fact that private schools happen to be located in relatively slow-growing states and therefore have not benefited proportionately from the population growth of the 1960's.

Table 1. Catholic Elementary School Enrollment and Related Demographic Factors.

Year	(1) Enrollment (000)	(2) Infant Baptisms (000)	(3) School-age Population (S_T)	(4) Catholics (000)	(5) Enrollment S_T	(6) Baptisms per 1,000 Catholics
1955	3,545	1,205	6,688	33,574	.530	35.9
1956	3,709	1,246	6,962	34,563	.533	36.1*
1957	3,851	1,275	7,258	36,500	.531	34.9
1958	4,084	1,308	7,624	39,505	.536*	33.1
1959	4,286	1,345	8,008	40,871	.536*	32.9
1960	4,402	1,486*	8,374	42,105	.526	35.3
1961	4,452	1,352	8,713	43,877	.511	31.5
1962	4,609*	1,322	9,051	43,851	.509	30.1
1963	4,557	1,322	9,385	44,874	.486	29.5
1964	4,567	1,310	9,712	45,641	.470	28.7
1965	4,492	1,275	10,121	46,246	.444	27.6
1966	4,370	1,191	10,250	46,865	.426	25.4
1967	4,106	1,139	10,378	47,468	.396	24.0
1968	3,860	1,095	10,539	47,873	.373	22.9
1969	3,607	1,087	10,656	47,872	.338	22.7
1970	3,359	1,088	10,720*	48,215*	.313	22.6
1971			10,720*			
1972			10,603			
1973			10,397			
1974			10,006			
1975			9,741			
1976			9,507			

*Peak year

Sources: Enrollments, 1967-70, are from the NCEA Data Bank. All other data are from the Official Catholic Directory, 1943-70.

Statistical Sources of Enrollment Decline

Enrollment in the Catholic schools depends upon two general factors--the number of school-age children and the fraction of this group which enrolls in the Catholic schools. The former is mainly a function of the birth rate, and the latter depends upon the many factors that influence parents' decisions.

In order to distinguish between the two, we first develop a time series of Catholic elementary school-age children. The best source of data appears to be the yearly number of infant baptisms. This probably gives a better picture of the birth rate than can be inferred from national birth rate data, since using national data would necessitate making the assumption that the birth rate among Catholics and non-Catholics is the same.

Children are usually baptized a few weeks after they are born. Elementary schools are comprised mostly of children aged six to thirteen. Therefore, the elementary school students in year T were baptized in years T-13 through T-6. Using the formula

$$S_T = \sum_{i=T-13}^{T-6} B_i$$

we can build up a series of age-eligible Catholic children (S) from the baptism (B) data of the Official Catholic Directory, 1943 to 1970.

S_T is, of course, not exact, due to deaths, international migration, and data errors. Also, some non-Catholics attend Catholic schools. However, if it is assumed that these factors bear a constant proportional relationship to baptisms over time, then the data are adequate for the purposes at hand. It is also possible that some Catholics are not baptizing their children. To this extent, S_T underestimates the true number of school-age children. However, it is doubtful that these unbaptized children will ever be enrolled in Catholic schools, and this makes S_T an even better measure of the "client population."

Table 1 shows the time series of elementary enrollment, Catholic school-age population (S_T), the number of Catholics, and the important combinations of these variables. The most interesting and significant aspect of these data is that Catholic school enrollment has been declining despite an increase in the size of the client population. The decline in the number of births has not yet had any impact upon enrollment. Looking at the 1975 and 1976 figures, it is clear that the Catholic schools will by then have the additional handicap of a 10 percent drop in the number of age-eligible children.

Thus, all of the decline in enrollment until 1971 may be attributed to factors other than population decreases. The column "Enrollment/School-Age Population" illustrates another interesting point--these other factors have been operating since 1959, the peak year of what might be termed "loyalty" to Catholic schools. The 1959-62 increase in enrollment was due solely to the increase in the number of children. Thus, even in the early 1960's there were signs that the Catholic schools were headed for trouble.

How will these trends affect 1975 enrollment? Suppose that the decline in enrollment per school-age child continues to drop at the same rate it did between 1965 and 1970. Then, in 1975 only 22.1 percent of the 9.741 million school-age Catholic children would be attending Catholic elementary schools, giving an enrollment of 2.15 million. This figure is almost identical to the forecast made in the second part of this study. This shows that the forecast, although the result of a different statistical technique, is consistent with enrollment per child declining at a constant rate from 1965. Since the number of children will decline, 1970-75 enrollment will be decreasing at a rate faster than in 1965-70.

Enrollment Declines and School Closings

Enrollment declines may be divided into two categories--the decrease which was due to parents' decisions not to enroll students in Catholic schools, and that which resulted from school closings. These two processes might be labeled "voluntary" and "involuntary," or as a "change in demand" versus a "change in supply." The former is due to decisions by parents or changes in the number of school-age children, and the latter is due to some decision by school administrators.

Table 2 illustrates the changes in both enrollment and the number of schools that have taken place since 1967. With a few simple calculations, we can determine the relative importance of the two sources of enrollment decline. As a rough rule of thumb, we can assume that the schools that have closed since 1967 had, in 1967, about half as many students per school as did the schools that are still open. Therefore, the 984 elementary schools that closed probably enrolled 197,000 (= 984 X 200 students per school) students. Enrollment in these schools surely would have declined by at least the same 18 percent as total enrollment, leaving 167,000 students in 1970. This 167,000 is 22 percent of the total drop in enrollment, and in this sense it may be said that school closings accounted for 22 percent of the decline in elementary enrollment.

The same calculation for high schools shows that 76 percent of enrollment declines were due to school closings.

TABLE 2. Enrollment Declines and School Closings (Catholic Schools).

	Elementary			Secondary		
Year	Enrollment (000)	Schools	E/S	Enrollment (000)	Schools	E/S
1967	4,106	10,350	398	1,093	2,277	480
1970	3,359	9,366	359	1,008	1,986	508
Net Change	747	984		85	291	
Percent Change	-18%	-9.5%		08%	-13%	

This shows that the enrollment changes of primary and secondary schools were of a considerably different nature. Secondary enrollment drops were mainly due to school closing; in spite of the relatively high tuitions, demand dropped only slightly. Elementary schools did not close quite as rapidly, but the demand for enrollment fell much more sharply, though elementary tuitions are much less ($70 versus $284) than secondary tuitions.

Whether these trends will continue is uncertain. One possibility is that far more elementary schools will close in the next few years, thereby releasing resources (religious teachers and diocesan funds) to the high schools, where the demand appears to be much more stable.

All of this has complications for assessing the impact of state aid to nonpublic schools. It has been argued that state aid would do little to arrest enrollment declines insofar as these declines are the result of changes in tastes, population movements, and changes in the birth rate. The present analysis tends to dispell the notion that state aid would stem elementary enrollment declines by helping to keep the schools open. In fact, school closings played a minor role in recent developments, in the sense that even if no schools had closed enrollment would have gone down by almost as much.

Of course, it should not be taken for granted that state aid would be altogether successful in preventing future school closings.

The Demand for Education by Parents

The analysis of demand for enrollment may be approached in the same manner as the demand for any other good or service, though, of course, certain differences are apparent. The basic theory of demand is that a person's decision on how much of the good to buy depends on (a) its price, (b) the prices of other goods, (c) the consumer's income, and (d) tastes. If we observe any changes in the enrollment, we should look for possible changes among this list of determining factors.

In the case of a divisible good, like milk, the consumer is free to purchase any quantity he likes so long as his income holds out. With school enrollment, though, he has only two alternatives for each child--whether or not to send him to a private school. It is therefore obvious that some changes in the determining variables will not necessarily result in a change in the quantity of education purchased by one family. For example, a ten dollar increase in tuition may not affect the behavior of one particular family. But it may well affect some other family's decisions and will therefore change the aggregate demand for enrollment.

Let us consider these factors in greater detail.

Price. The price of Catholic schools to its users is the tuition charged plus other incidentals such as transportation. Probably the only other good whose price is relevant is public schooling. While this price is perceived essentially as zero, it is reasonable to refer here to the very important questions of quality. If the quality of Catholic schooling increases and tuition remains the same, it means that the real price of Catholic schooling has decreased--parents get more for their money. Similarly, an increase in the quality of public schools can be viewed as an increase in the relative price of Catholic schools, and we would expect Catholic school enrollment to decrease as a result.

Income. Family income may affect the demand for enrollment, but there is no clear theory to suggest whether the relationship is positive or negative. Because the price of private schooling is always equal to or greater than the price of public schooling, we would expect the pure income effect to be positive--higher income implies greater private school enrollment. However, this would be true only for a set of people with various income levels, but with identical tastes and environments. In fact, such a control group is non-existent. For one thing, families with higher incomes tend to live near higher quality public schools. Also, it is possible that tastes vary somehow, with higher (or lower) income families placing higher value on the special characteristics of private schools.

In the United States, over time incomes have grown and, in recent years, private school enrollment has declined. It is probably the case that income growth has led to higher enrollment than if income had not grown, but these effects were far exceeded by forces leading to lower enrollment. Since this study is concerned with the problem of declining enrollment, it does not appear to be fruitful to try to isolate the income effect, which does not appear to be very significant.

Tastes. During the 1960's, a change in tastes apparently took place such that the unique characteristics of private schools were no longer valued so highly. Such characteristics might include religious training and stricter discipline. Very little beyond this can be said; lacking hard data on tastes, we cannot say how much of the enrollment decline has been due to this factor. However, insofar as these changes follow a steady time trend, they are taken into account in making the enrollment forecasts.

In the next two sections, some of these factors are examined in much greater detail.

Geographic Mobility and Changes in Perceived Relative Quality As a Source of Enrollment Decline

Although the school-age population in 1970 is either at or near its all-time high, many private schools have suffered enrollment declines because of a drop in the number of age-eligible children within range of the school. At an aggregate level, the states with the greatest fractions of their students in private schools are the states with the slowest growth rates of population. A much more important form of geographic mobility is the movement out of the central city to the suburbs. This would not have had such a great effect if students had simply moved from one private school to another. However, when they arrive in their new suburban neighborhoods, the students are much less likely to find a private school within a reasonable distance. Furthermore, even if there is a private school in the suburbs, it may be judged inferior to the nearest public school. Back in the central city, however, the private school is more often superior to the competing public school, and it therefore attracts a larger portion of the age-eligible children.

These statements are all consistent with a study that was made of the Catholic schools in the Archdiocese of St. Louis. The Archdiocese was divided into three areas, as shown in Table 3. During the period 1964-69, elementary enrollment dropped the fastest in the City.

As a first step in analyzing the reasons for this change, enrollment is defined as equal to the number of Catholic families multiplied by the enrollment per family, ignoring for the present the relatively small number of students that come from non-Catholic families. Table 3 presents index numbers for each of these variables, with their 1964 levels taken to equal 100. (For example, the City enrollment index is 74, indicating a 25 percent decrease since 1964.)

TABLE 3. Indexes of Enrollment and Factors That Affect It (1964 = 100), St. Louis, 1964-69.

	Enrollment	Catholic Families	Enrollment per Family
St. Louis City	74	85	88
St. Louis County	82	112	73
Outer Counties	90	118	72
Archdiocese	81	105	78

This table shows that enrollment has declined in all three areas of the Archdiocese, with City enrollment experiencing the sharpest drop. However, enrollment per family has decreased the least in the City, showing that the average City family has, in this sense, been the most "loyal" to the Catholic schools. However, the City schools have suffered considerably from a decrease in the number of Catholics living there, while Catholic population has increased elsewhere.

Enrollment per family can be broken down into two component factors. It is the product of children per family and enrollment per child, that is, enrollment relative to the number of children in the family. The former variable represents a changing birth rate and a changing character of the population, that is, more or fewer families in the child-bearing age range. The other variable, enrollment per child, is a more exact way of expressing actual preferences about Catholic versus non-Catholic schools for a family with children.

While exact demographic data for Catholics are not available, we can take the number of baptisms to be a measure highly correlated with children per family. In Table 4, enrollment per family is presented again, along with the index of change in baptisms per family. This is admittedly a rough index, but it is at least consistent with the belief that the number of school-age children per family is decreasing most rapidly in the City.

TABLE 4. Indexes of Enrollment Per Family and the Factors That Affect It (1964 = 100), St. Louis, 1964-69.

	Enrollment per Family	Children per Family	Enrollment per Child (estimate)
St. Louis City	88	81	108
St. Louis County	73	86	86
Outer Counties	72	90	80
Archdiocese	78	86	91

Although yearly data on the proportion of school-age children enrolled in Catholic schools are not available, the index of change in this variable may be inferred from the table, and these estimates are presented in the last column. These data show that "loyalty" to the Catholic schools has actually grown somewhat in the City but has decreased especially in the remainder of the St. Louis County and also in the Outer Counties.

What can be inferred from these data? First, they are consistent with the hypothesis that enrollment in Catholic schools depends upon perceived quality differences between Catholic and public schools, if it is conceded that the quality of public schools in the City has declined relative to schools elsewhere. A similar hypothesis, consistent with the data, is that Catholic schools provide an alternative to inferior public schooling, but in areas where public schools are of adequate quality preferences of Catholic parents for Catholic schools have declined. This means that either people have decreased their demand for the unique services that Catholic schools provide or that the Catholic schools are providing less of these unique services, i.e., religious training, discipline, and high quality instruction.

Second, apart from the question of school quality, the evidence is consistent with the hypothesis that mobility itself is responsible for enrollment declines. When Catholics move to the suburbs, they are moving into areas where Catholic schools are not so well established and, indeed, where they would face severe handicaps because of the relative sparseness of population and the current high cost of construction.

Tuition Increases As a Source of Enrollment Decline

Although it is in general true that higher tuition results in lower enrollment, it would be wrong to say that recent declines in Catholic school enrollment were caused, to any significant extent, by tuition increases. No research, to our knowledge, has been able to show that the price elasticity of demand for private education is significantly different from zero. (Price elasticity is defined as the percentage decrease in quantity demanded divided by the percentage increase in price. For example, an elasticity of -0.1 would mean that a 10 percent tuition increase would cause a 1.0 percent drop in enrollment.) This is not to deny any price-quantity relationship, but simply to say that whatever effect there is has not been large enough to measure accurately.

Let us review the evidence:

(1) In the St. Louis study,[1] changes in tuition and enrollment were observed in a sample of 103 schools. There was no significant relationship.

(2) In a study of the Archdiocese of Atlanta,[2] a similar test of data on fifteen schools discovered no relationship.

---

[1] E. Bartell, et al., Catholic Education in St. Louis: Allocation and Distribution of Human and Financial Resources. Office for Educational Research, University of Notre Dame, 1970.

[2] K.M. Brown, Catholic Education in Atlanta: An Economic Analysis. Office for Educational Research, University of Notre Dame, 1971.

(3) On a more aggregate level, it was found that, among the dioceses of New York state, no tuition-enrollment relationship was evident.

(4) In the Archdiocese of New York, between 1964 and 1968, elementary school tuition doubled, but enrollment dropped by less than 10 percent.

Other examples could no doubt be found. Their common characteristic is that, while tuition and enrollment have moved in opposite directions, there is no real evidence of a significant causal relationship.

Several considerations help explain these findings. Elementary school tuitions are not as high as commonly believed. In 1968, tuitions in St. Louis averaged only $28 per pupil. According to the NCEA survey, the average tuition (plus fees) in the United States was $70. Economic theory suggests that demand will be more inelastic the smaller the fraction of one's income is spent on the good. Thus, even though tuitions increased by 20 percent in 1970, this was only $12 per student more than the previous year, which is certainly not a significant part of the typical family's resources.

Another complication interferes with an accurate measurement of demand elasticity. Schools with declining enrollments hesitate to raise tuitions, while schools with rising enrollments and long waiting lists feel no such reluctance. Thus, a careless observer might conclude that price and quantity are positively correlated. Lack of data and an adequate model of school decision making precludes the solution of this identification problem at this time.

Finally, many other factors have been more important than tuition changes, and their effects tend to statistically camoflauge those of tuition changes.

For later analysis, some measure of demand elasticity will be useful, even though it is somewhat crude. Enrollment may be said to change because of (1) tuition changes and (2) other autonomous reasons. The percentage change in enrollment equals elasticity times percentage change in tuition, plus the autonomous enrollment change measured in percentage terms:

$$\frac{dE}{E} = (\text{elasticity}) \frac{dT}{T} + A$$

Between 1967 and 1968, tuition increased 7 percent and elementary enrollment dropped 6 percent. Between 1969 and 1970, the figures were 20 percent and 6.9 percent. Inserting these figures to form two equations, and solving, we obtain an elasticity of -0.07, which is certainly consistent with the other evidence that demand is inelastic (i.e., close to zero). In this simplistic formulation, A equals 5.5 percent, meaning that enrollment would decline 5.5 percent even if tuition were held constant.

This, of course, is only an approximation, and the elasticity certainly varies from school to school. However, it would be hard to argue that any other estimate is more accurate than something in the range of -0.05 to -0.15.

High school enrollment does not appear to have been greatly affected by tuition, even though tuition greatly exceeds that of elementary schools. In 1970, high school tuitions rose significantly more than did elementary tuitions, but the enrollment decline was less in the high schools. As was pointed out earlier, a substantial part of the enrollment decline was due to school closings. Waiting lists are still common. Again, a rough but reasonable estimate of elasticity would be -0.1.

State Aid and Enrollment

It is frequently alleged that state aid of some kind is necessary to halt the enrollment declines in Catholic schools. What this section attempts to show is that, on the contrary, state aid in the amounts likely to be forthcoming would not have any significant impact upon enrollment.

In order to deal with concrete data, let us ask the question of what would have happened if an aid package providing $35 per elementary school pupil had taken effect in the fall of 1970. ($35 per pupil is about the average of the state-aid plans that have been discussed.)

How, in general, will state aid affect tuition? When a school receives a grant from the state, it can use it in some combination of lower tuition, lower parish subsidy, and higher school spending. Since there is no useful precedent to go on, we will have to derive our predictions from some reasonable assumptions about how schools will behave in allocating state aid. Let us assume that:

1. Tuitions will not decrease.
2. Parish subsidies will not increase. This seems reasonable in light of the fact that in recent years they have increased by only a little without any state aid. Also, parish income appears to be constant or decreasing, while other parish expenses are on the way up.
3. State aid will not induce additional spending by the schools. This does not seem too likely, and the reader can easily change the following analysis to match his own ideas of what a

> "realistic" assumption would be. The present assumption will obviously bias downward our estimate of tuition increase.

From these three assumptions it follows that:

1. If, in the next year, the increase in per pupil costs exceeds the grant per pupil, parish subsidy will be unchanged and tuition will go up.
2. If the grant exceeds next year's increase in pupil costs, tuition will be unchanged and parish subsidy will decrease.

In 1970-71, elementary school operating expenses were 20 percent higher than in 1969-70, or $41 per pupil. If all of this increase had been matched by increased tuition, tuition would have increased by nearly 70 percent. In fact, parish and diocesan subsidies increased such that tuition had to be raised by only 20 percent. Enrollment declined 6.9 percent. Assuming a price elasticity of demand of -0.1, the tuition increase caused a 2 percent drop in enrollment, and the other 4.9 percent was due to other factors.

If state aid of $35 per pupil had been instituted in 1970, then (assuming no increase in parish and diocesan subsidy) tuition would still have had to increase by $6 per student. This 11 percent increase would have resulted in an enrollment decline of 1.1 percent. Added to the autonomous decline of 4.9 percent, the total enrollment decline still would have been 6 percent. Thus, under these assumptions, state aid would have had only a minor (0.9 percent) impact on enrollment.

It is important to realize that this small effect would take place only for one year. Even if state aid were to continue at the same level, it would have no further impact on enrollment, since the annual increase in costs would continue just the same. Only if state aid per pupil were to increase every year would there be any long run effect on enrollment.

As was mentioned earlier, assumption 3, that aid would not induce increased expenditures, is undoubtedly unrealistic. Relaxing this assumption even slightly leads to the conclusion that state aid would have no effect whatever on enrollment.

The same basic conclusion holds for high schools. In many regions, there appears to be a significant excess demand (i.e., waiting list) despite increased tuitions, meaning that demand elasticity is close to zero. Thus, any reduction in tuition increases that state aid would allow would not affect enrollment at all. However, this excess demand will probably disappear for most schools within five years, as the number of graduates of Catholic grade schools declines, and so state aid to high school students may make some slight difference in the mid-1970's.

Actually, most of the decline in high school enrollment may be traced to high school closings. The question then to be asked is whether state aid will affect the decision of whether to close schools. Even if there is some significant effect of this kind, the same conclusion holds as before--it will be only a one-year effect, and (unless state aid increases every year) the trend in future years will be unaffected.

It may be argued that the increase in costs in 1970 was exceptionally large, so that our example is not of general relevance. The reader may experiment with other examples, but if the basic assumptions about demand elasticity and about the use of the state aid are accepted, it will be seen that the aid package would still have a small impact on enrollment.

II. CONCLUSIONS

This section has discussed the causes for the recent decline in nonpublic enrollment and has attempted to give some idea of their relative importance. The question naturally arises as to which of these forces could be changed by public policy, and the tentative answer is that these forces are largely immune to the commonly cited "solutions" to the problem.

Most of the decline in elementary enrollment has been due to decreased demand, rather than school closings. It was argued that high tuitions were not the cause of this and so that the somewhat lower tuitions that state aid might allow would not have a large effect on enrollment. Rather, the causes seem to be geographic movement by families and changes in tastes. By 1975 the schools will have another problem--the drop in school-age population.

It is, of course, possible that elementary school closings will accelerate, and that sufficiently large doses of state aid could prevent this. But even so, large declines in enrollment seem inevitable for the other reasons mentioned.

The situation is a bit different with Catholic high schools. Here, financial pressures have forced closings that have accounted for most of loss in enrollment. Again, the obvious statement is that sufficiently large amounts of state aid could keep these schools open, but then the much harder question arises--how much aid would be required? Even so, the high schools will also be facing the problem of lower demand and lower enrollment due to declines in the number of private elementary school graduates and, indeed, the size of the secondary school-age population.

III. FORECASTS OF ENROLLMENT

Introduction

In this section, the main purpose is to provide estimates of nonpublic school enrollment for 1975 and 1980, state-by-state. The Catholic and non-Catholic schools are treated separately because of the different availability of data and because Catholic enrollment projections are used in another section of this study.

The basic causes of enrollment decline are fairly well known. The important question remains: What will be the trend in enrollment during the 1970's? The basic method used here to arrive at 1975 and 1980 forecasts is regression analysis, which expresses enrollment as a function of several "explanatory" variables. After an equation is estimated, forecasts for 1975 are made by substituting the 1975 values of the explanatory variables into the equation and solving for enrollment.

Forecasts of Catholic School Enrollment, 1975

A long series of data is available for Catholic school enrollment and several of the variables that affect it. Basically, enrollment in the Catholic schools may be said to depend upon (1) the number of school-age children and (2) the factors that influence parents' decisions on whether to enroll their children in Catholic schools.

The number of school-age children is reflected fairly well by the number of infant baptisms that took place in previous years. High school enrollment is affected by a similar variable--the number of students enrolled in elementary schools some years earlier. The rationale is that most Catholic high school students attended Catholic elementary schools, and this is confirmed by the data.

Other factors that have influenced enrollment include tuitions, which have increased with time, parents' tastes, which over time have exhibited a lessened preference for Catholic schools, and migration, which with time has also had a negative effect on enrollment as Catholics have moved from areas near established schools to areas without easily accessible Catholic schools. There are two problems with incorporating these variables. First, the data are not available. Second, what information is available indicates that each of these variables has followed a fairly steady time trend. In this situation it is impossible to identify the effects of each variable separately.

For descriptive purposes, it would be interesting to know the effects of each variable separately, but for forecasting enrollment such knowledge is not necessary. Suppose we define a variable called time, which takes the values 1, 2, 3, ..., N, for the N years of data. Then time is clearly a variable with a steady upward trend and is therefore correlated, either positively or negatively, with the other explanatory variables that have grown or declined with time. This variable may be used to summarize the effects of all such variables. Using a second variable, time squared, takes account of all variables that have increased or decreased at an increasing rate.

There is one more advantage of using time as a variable. If it were possible to include, say, tuition as a variable, in order to predict 1975 enrollment it would be necessary to predict 1975 tuition--a questionable venture, at best. The variables we do use, baptisms and elementary school enrollment, are lagged several years so that it is relatively easy to estimate the values pertinent to 1975 forecasts.

For each state, several equations were estimated. An equation was judged satisfactory or not depending upon its goodness of fit, the statistical significance of all estimated parameters, lack of autocorrelation in the residuals, accurate fit at the turning points, and smallness of residuals for the last three years.

A few comments on these procedures: Any equation with even one statistically insignificant coefficient was rejected, since it would therefore be of little use in forecasting. A few equations with insignificant constant terms were re-estimated, with the constant set equal to zero. Autocorrelation was often a problem, but the standard procedures of taking differences are not very helpful when time is one of the dependent variables. Therefore, equations with severe autocorrelation were rejected. Some equations had high correlation coefficients but missed recent declines in enrollment. These equations were rejected because enrollment declines, it is believed, are not due to random shocks.

Some equations were rejected simply because some other equation rated better by every criterion. In many cases, however, two or more equations appeared to be equally plausible, and so their forecasts were averaged to give the final figure. Sometimes the only admissable equation would give a rather implausible forecast. This sometimes occurred with the (T, T^2) form, which, due to its characteristic of increasing rate of change, would sometimes predict zero enrollment in 1975. In such cases, the "ratio method" was introduced, predicting 1975 enrollment as follows: $E'_{75} = E_{70} (E_{70}/E_{65})$. In such cases, the forecast is an average including the ratio method. In a few cases (mostly in small states) no equation was judged adequate, and so the ratio method was used exclusively.

Forecasts of Catholic School Enrollment, 1980

The forecasts for 1975 show enrollment declining at an increasing rate. This is consistent with the belief that decrases in loyalty and school closings will proceed at least at the same rate as in recent years, and that in addition the number of school-age children will decline. In making forecasts for 1980, the question arises as to whether the rate of decline will continue to accelerate. That is, in Figure 1, which path of enrollment is more likely, A or B?

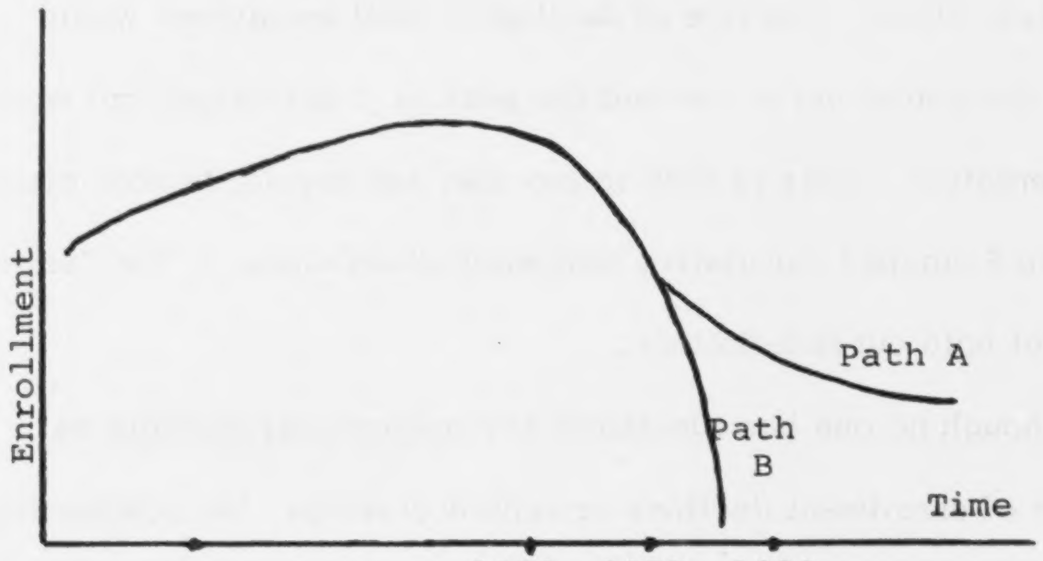

FIGURE 1

There are several reasons why Path A is more likely. As the least viable schools close, this leaves more demand and resources for those remaining.

A more general line of reasoning for not forecasting the complete demise of the Catholic school system is as follows. Suppose that there were one measurable cause for school closings (for example, parish subsidy per pupil). Suppose that for each school there is some critical value of this variable, so that when the variable reaches this level the school closes. The critical values would no doubt follow some peaked distribution, not necessarily normal, with the poorest parishes at one end of the distribution and the richest at the other. As the actual value of this variable increases over the years, schools at the lower end of the distribution close. The rate of decline in total enrollment would increase as the actual value reached the peak of distribution, but would decrease thereafter. (This is only to say that any regular peaked distribution has an S-shaped cumulative frequency distribution.) The "strong" schools might hold out indefinitely.

Although no one has identified any one critical variable as the indicator of enrollment declines or school closings, the combination of actual factors is probably distributed in this way. During the late sixties, the weakest schools closed, for a complex of reasons, but the stronger ones stayed open. After all of the weaker schools are closed, the remaining schools will endure through the 1970's.

Just what proportion of schools fall into each category is open to question. All that is suggested is that some schools will still exist in 1980. In order to have forecasts that reflect this, those methods that predict increasing rates of decline after 1975 are abandoned. Instead, we assume a constant rate of change in 1975-80 that is at the same average rate as is forecast for 1970-75. The formula is:

$$E'_{80} = E'_{75}\,(E'_{75}/E_{70}).$$

The forecasts are given in Tables 1 and 2, and the forecasting equations are presented in Tables 3 and 4.

TABLE 1. Catholic Elementary School Enrollment - Actual 1970 and Forecasts for 1975 and 1980.

State	1970[1]	1975[2] (forecast)	1980[3] (forecast)	Methods of Forecasting 1975 Enrollment[2]
Connecticut	64,590	43,500	29,300	A
Maine	10,675	4,500	1,900	B,E
Massachusetts	129,074	85,100	56,100	C
New Hampshire	18,324	10,700	6,300	A,D
Rhode Island	26,310	13,300	6,700	A,E
Vermont	5,571	2,100	800	C
Delaware	12,884	8,100	5,100	A,E
Washington, D. C.	35,706	21,800	13,300	A,E
Maryland	46,777	31,100	20,700	C
New Jersey	214,470	145,500	98,700	A,E
New York	520,238	330,000	209,300	A
Pennsylvania	358,334	212,500	126,000	A,E
Illinois	302,657	194,400	124,900	C
Indiana	70,819	45,100	28,700	C
Michigan	161,955	101,400	63,500	A
Ohio	242,000	176,000	128,000	A,B,E
Wisconsin	129,400	83,600	54,000	E
Iowa	46,731	19,500	8,100	C
Kansas	25,239	10,900	4,700	A,E
Minnesota	80,741	31,100	12,000	C
Missouri	92,009	57,600	36,100	A,E

---

[1] Source: NCEA Data Bank

[2] The methods use the following equations:

A. $E' = a + b\,(\text{Time}) + c\,(\text{Time}^2)$

B. $E' = a + b\,(\text{Time}) + c\,(\text{Baptisms})_{t-4}$

C. $E' = a + b\,(\text{Time}^2) + c\,(\text{Baptisms})_{t-4}$

D. $E' = a + b\,(\text{Time}^3) + c\,(\text{Baptisms})_{t-4}$

E. $E' = E_{1970}\,(E_{1970}/E_{1965})$

When more than one method is specified, the forecast is an average of those given.

[3] $E' = E'_{1975}\,(E'_{1975}/E_{1970})$

TABLE 1. Catholic Elementary School Enrollment - Actual 1970 and Forecasts for 1975 and 1980 (continued).

State	1970[1]	1975[2] (forecast)	1980[3] (forecast)	Methods of Forecasting 1975 Enrollment[2]
Nebraska	30,175	16,400	8,900	A,C
North Dakota	8,275	4,900	2,900	E
South Dakota	7,645	4,400	2,500	E
Alabama	14,445	12,000	10,000	E
Arkansas	6,829	5,600	4,600	C
Florida	60,604	58,300	56,100	A
Georgia	11,242	9,800	8,500	E
Kentucky	44,971	18,100	7,300	A,E
Louisiana	89,336	70,300	55,300	A,E
Mississippi	10,035	6,600	4,300	E
North Carolina	10,825	9,400	8,200	A,E
South Carolina	6,691	5,500	4,500	E
Tennessee	11,681	6,000	3,100	A
Virginia	21,993	11,200	5,700	C,D
West Virginia	7,853	3,500	1,600	A,B
Alaska	365	100	0	E
Arizona	17,056	13,400	10,500	C
California	224,526	160,000	114,000	C
Colorado	21,091	14,600	10,100	C
Hawaii	11,086	10,100	9,200	C
Idaho	3,685	2,200	1,300	C
Montana	6,681	3,100	1,400	E
Nevada	3,116	2,500	2,000	E
New Mexico	8,790	3,900	1,700	E
Oklahoma	6,682	3,600	1,900	E
Oregon	15,593	8,700	4,900	C
Texas	72,507	39,700	21,700	B,E
Utah	2,590	1,500	900	C
Washington	26,396	16,300	10,100	C
Wyoming	2,043	1,000	500	B
TOTAL	3,359,311	2,150,500	1,407,900	

TABLE 2. Catholic Secondary School Enrollment - Actual 1970 and Forecasts for 1975 and 1980.

State	1970[1]	1975[2] (forecast)	1980[3] (forecast)	Methods of Forecasting 1975 Enrollment[2]
Connecticut	21,116	19,500	18,000	B
Maine	1,515	670	300	E
Massachusetts	44,791	25,500	14,500	A,B
New Hampshire	4,037	2,400	1,400	A
Rhode Island	7,416	5,890	4,700	A
Vermont	1,937	1,090	600	E
Delaware	3,958	3,530	3,100	B
Washington, D.C.	12,821	11,890	11,000	A
Maryland	13,895	12,450	11,200	A
New Jersey	60,542	58,200	56,000	B
New York	147,572	108,000	79,000	B
Pennsylvania	111,808	94,100	79,200	A,B
Illinois	93,373	80,360	69,200	A
Indiana	18,509	13,030	9,200	A
Michigan	53,036	37,850	27,000	A
Ohio	76,095	71,300	66,800	B
Wisconsin	24,992	15,790	10,000	A
Iowa	16,909	10,430	6,400	A
Kansas	7,900	5,060	3,200	E
Minnesota	18,788	13,400	9,600	E
Missouri	29,182	23,200	18,400	A

---

[1] Source: NCEA Data Bank

[2] The methods use the following equations:

A. $E' = a + b\,(\text{Time}) + c\,(\text{Time}^2)$
B. $E' = a + b\,(\text{Time}) + c\,(\text{Elementary Enrollment})_{t-3}$
C. $E' = a + b\,(\text{Time}^2) + c\,(\text{Elementary Enrollment})_{t-3}$
D. $E' = a + b\,(\text{Time}^3) + c\,(\text{Elementary Enrollment})_{t-3}$
E. $E' = E_{1970}\,(E_{1970}/E_{1965})$

When more than one method is specified, the forecast is an average of those given.

[3] $E' = E'_{1975}\,(E'_{1975}/E_{1970})$

TABLE 3. Elementary School Forecasting Equations.
EQUATION A
Enrollment = a + b(Time) + c (Time^2)

State	a	b	c	R^2
Connecticut	49,146	5,847	-291.3	.86
New Hampshire	19,725	1,267	-80.8	.93
Rhode Island	32,684	2,407	-168.4	.94
Delaware	10,084	1,351	-74.0	.99
Washington, D. C.	29,833	3,609	-204.8	.98
New Jersey	169,714	20,418	-1,087.0	.97
New York	475,182	38,474	-2,176.0	.96
Pennsylvania	320,606	36,061	-2,115.0	.99
Michigan	164,429	19,416	-1,066.0	.96
Ohio	220,744	19,624	-1,152.0	.98
Kansas	28,842	2,897	-192.0	.95
Missouri	88,517	10,662	-602.0	.82
Nebraska	23,212	3,647	-198.1	.96
Florida	22,760	5,602	-192.0	.98
Kentucky	42,125	6,493	-388.9	.95
Louisiana	83,040	4,242	-244.8	.83
North Carolina	6,088	867	-37.7	.91
Tennessee	12,702	1,331	-78.5	.97
West Virginia	8,657	893	-59.3	.98

TABLE 3. Elementary School Forecasting Equations.
EQUATION A
Enrollment = a + b(Time) + c (Time^2)

State	a	b	c	R^2
Connecticut	49,146	5,847	-291.3	.86
New Hampshire	19,725	1,267	-80.8	.93
Rhode Island	32,684	2,407	-168.4	.94
Delaware	10,084	1,351	-74.0	.99
Washington, D. C.	29,833	3,609	-204.8	.98
New Jersey	169,714	20,418	-1,087.0	.97
New York	475,182	38,474	-2,176.0	.96
Pennsylvania	320,606	36,061	-2,115.0	.99
Michigan	164,429	19,416	-1,066.0	.96
Ohio	220,744	19,624	-1,152.0	.98
Kansas	28,842	2,897	-192.0	.95
Missouri	88,517	10,662	-602.0	.82
Nebraska	23,212	3,647	-198.1	.96
Florida	22,760	5,602	-192.0	.98
Kentucky	42,125	6,493	-388.9	.95
Louisiana	83,040	4,242	-244.8	.83
North Carolina	6,088	867	-37.7	.91
Tennessee	12,702	1,331	-78.5	.97
West Virginia	8,657	893	-59.3	.98

TABLE 3. Elementary School Forecasting Equations (continued).
EQUATION B
Enrollment = a + b (Time) + c $(\text{Baptisms})_{t-4}$

State	a	b	c	R^2
Maine	12,350	-995.0	2.13	.98
West Virginia	11,237	-15.6	0.51	.95
Texas	-63,270	-6,410.0	3.22	.92
Wyoming	632	-83.4	1.82	.92
Ohio	87,101	-2,306.0	3.57	.97

TABLE 3. Elementary School Forecasting Equations (continued).
EQUATION C
Enrollment = a + b (Time^2) + c $(\text{Baptisms})_{t-4}$

State	a	b	c	R^2
Massachusetts	52,921	-162.8	1.68	.94
Vermont	-3,917	-16.0	3.60	.98
Maryland	33,340	-47.4	2.20	.93
Illinois	44,908	-346.4	4.70	.97
Indiana	18,705	-110.2	4.61	.95
Iowa	-13,846	-68.9	5.26	.97
Minnesota	24,207	-189.3	3.60	.99
Nebraska	0	-26.2	4.26	.85
Arkansas	5,953	-5.5	1.87	.75
Virginia	28,066	-46.1	1.08	.82
Arizona	13,865	-17.9	0.68	.71
California	52,038	-321.5	2.08	.82
Colorado	8,431	-25.1	1.56	.92
Hawaii	5,951	-6.2	1.25	.70
Idaho	3,932	-9.1	1.34	.92
Oregon	1,302	-25.9	3.62	.96
Utah	0	-3.0	1.97	.85
Washington	12,921	43.7	2.26	.97

TABLE 3. Elementary School Forecasting Equations (continued).
EQUATION D
Enrollment = a + b(Time^3) + c (Baptisms)$_{t-4}$

State	a	b	c	R^2
New Hampshire	8,836	-1.40	2.39	.98
Virginia	28,313	-2.73	0.85	.89

TABLE 4. Secondary Forecasting Equations.
EQUATION A
Enrollment = a + b(Time) + c(Time)^2

State	a	b	c	R^2
Massachusetts	31,319	3,701	-167.1	.97
New Hampshire	3,215	429	-22.5	.72
Rhode Island	5,769	459	-21.6	.85
Washington, D. C.	5,619	1,733	-36.9	.99
Maryland	6,953	1,018	-35.6	.94
Pennsylvania	64,852	9,062	-379.3	.96
Illinois	44,877	7,490	-276.2	.88
Indiana	8,508	2,291	-97.3	.90
Michigan	38,254	4,603	-220.1	.87
Wisconsin	18,998	2,468	-124.8	.35
Iowa	10,251	2,074	-98.4	.81
Missouri	13,501	1,946	-70.7	.86
North Dakota	1,735	505	-26.5	.76
Arkansas	1,930	172	-7.8	.94
Kentucky	9,134	1,940	-94.8	.87
North Carolina	620	128	-6.5	.70
West Virginia	2,107	367	-18.9	.87
California	28,680	5,731	-186.6	.99
Colorado	4,124	525	-24.0	.90
Montana	2,361	344	-19.1	.85
Utah	435	125	-5.3	.90
Washington	5,780	555	-24.7	.97
Wyoming	175	67	-4.3	.79

TABLE 4. Secondary Forecasting Equations (continued)
EQUATION B
Enrollment = a + b (Time) + c (Elementary Enrollment)$_{t-3}$

State	a	b	c	R^2
Connecticut	-4,426	510.9	.250	.98
Massachusetts	-31,763	277.8	.432	.95
Delaware	1,143	40.8	.133	.88
New Jersey	3,970	1,386.0	.144	.89
New York	-11,504	1,665.0	.263	.84
Pennsylvania	42,290	835.2	.121	.76
Ohio	-2,840	1,159.0	.219	.97
South Dakota	0	65.5	.162	.82
Georgia	-153	40.4	.217	.91
South Carolina	0	11.6	.160	.96
Tennessee	-1,270	64.1	.348	.90
Virginia	1,626	72.8	.103	.90
Hawaii	981	49.3	.173	.87
Oklahoma	1,189	-59.6	.162	.93
Texas	8,386	178.4	.086	.80

TABLE 4. Secondary Forecasting Equations (continued)
EQUATION C
$\text{Enrollment}_t = s + b(\text{Time}^2) + c\ (\text{Elementary Enrollment})_{t-3}$

State	a	b	c	R^2
Nebraska	-2,262	5.5	.332	.97
Florida	-115	21.8	.196	.97
Louisiana	-5,054	25.3	.274	.85
Wyoming	-1,052	-0.8	.465	.78

Forecasts of Non-Catholic Nonpublic Enrollment, 1975 and 1980

The data for non-Catholic nonpublic (NCNP) schools are less suitable for use in forecasting because there is no accurate yearly time series for total enrollment, much less for each state. The United States Office of Education takes surveys every few years, the latest of which covers the 1968-69 year. That there are no accurate data for the last two years is unfortunate because these years appear to reflect turning points in the growth trends of the 1960's.

In order to obtain some sort of time series with observations for each year, enrollment information was collected from as many groups of schools as was possible. The result was a time series of data from 1961 to 1969 from schools which enrolled slightly more than 50 percent of the NCNP students.

It is believed that total enrollment has grown slightly since 1968, and this is born out by the following equation fitted to the data:

$$\underset{(1133)}{\log E = 5.4848} + \underset{(14.6)}{0.1034} \log \text{TIME} \qquad R^2 = .97$$

(t-statistics in parentheses)

This equation is consistent with a 2.0 percent increase in enrollment between 1968 and 1970, and so the data from the U. S. Office of Education 1968-69 survey was simply multiplied by 1.02 to give the state-by-state data for 1970, shown in Table 5. New York is the exception; independent data gathered by the State of New York were available and were used instead of the estimate.

Total enrollment, grades K-12, is used instead of a primary-secondary division. Since many states have only a handful of students in one or the other category, the standard error of estimate would be quite large if the division were made.

Two basic considerations suggest that NCNP enrollment will fall moderately during the 1970's. First, a definite slowdown in growth (and in some areas of decline) is already noticeable. These schools are facing most of the same problems that afflict Catholic schools, though they are not of the same magnitude. Second, it is expected that school-age population will be lower in 1980 than in 1970, though in 1975 it will be about the same as in 1970.

Using the same sample data, the following equation (the form of which allows for a downturn) was estimated:

$$\underset{(37.4)}{E = 292,890} + \underset{(6.41)}{22,507\ (\text{TIME})} \underset{(-4.04)}{-1142\ (\text{TIME}^2)} \qquad R^2 = .96$$

The 1975 estimate of enrollment is 92.4 percent of its 1970 level. This equation was used to estimate total 1975 enrollment, but the factor of .924 was not applied directly to each state, since it is known that the schoo-age population growth rate differs from region to region. The President's Commission on School Finance provided data on projected school-age population for four regions of the country (Northeast, North-central, South, and West), from which four five-year growth rates ($G_1, \ldots, G_4$) were computed. Then, the following equation must hold:

$$E'_{75} = B(G_1E^1_{70} + G_2E^2_{70} + G_3E^3_{70} + G_4E^4_{70})$$

That is, the regional growth rates may differ, but the factor B is multiplied by the term in parentheses to insure that the right hand side total the forecast of 1975 enrollment, which was set at 92.4 percent of total 1970 enrollment. This equation was solved to give B = .94, then the i-th state's 1975 enrollment was forecast as $E^i_{75} = .94 \; G_1E^i_{70}$ for all states in region 1, and so on.

The meaning of the term B is that enrollment is projected to be about 6 percent (1 - .94) less that 1970 enrollment after the slight decrease in school-age population is accounted for by multiplying by the G's. This method assigns the same growth rate to every state in a region. This is preferred to computing a growth rate for each state, since the sampling error in the estimate of the growth rate would then be much larger.

For the 1980 forecasts, it was assumed that in addition to the loss of enrollment due to a smaller school-age population, enrollment would decline by 5 percent for other reasons. Thus, the same forecasting procedure was employed with B = .95. These forecasts are quite tentative, since there is no way to be sure of the future birth rate and no strong basis for the 5 percent figure.

New York's enrollment was forecast separately, because availability of independent data. Enrollment there is expected to hold fairly steady because of the rapid growth of enrollment in Jewish schools, which comprised about 40 percent of New York's NCNP enrollment.

The forecasts are given in Table 5. Enrollment is predicted to fall by 7.6 percent in 1975 and by another 9.6 percent between 1975 and 1980. The state changes may be more or less, depending on the regional growth rates of population.

TABLE 5. Non-Catholic Non-Public Enrollment (K-12) - Estimated 1970 and Forecasts for 1975 and 1980.

State	1970	1975	1980
Connecticut	24,626	21,900	19,600
Maine	7,831	7,000	6,300
Massachusetts	31,146	27,800	24,800
New Hampshire	11,799	10,500	9,400
Rhode Island	4,313	3,800	3,400
Vermont	5,022	4,500	4,000
Delaware	3,158	3,000	2,700
Washington, D. C.	6,039	5,700	5,200
Maryland	22,561	21,200	19,400
New Jersey	23,536	21,000	18,800
New York	130,300	128,000	114,400
Pennsylvania	48,293	43,000	38,400
Illinois	55,694	49,200	43,600
Indiana	18,608	16,400	14,500
Michigan	49,098	43,400	38,500
Ohio	21,340	18,900	16,800
Wisconsin	41,430	36,600	32,400
Iowa	8,599	7,600	6,700
Kansas	4,615	4,100	3,600
Minnesota	17,948	15,900	14,100
Missouri	21,163	18,700	16,600
Nebraska	6,679	5,900	5,200
North Dakota	1,086	1,000	900
South Dakota	2,168	1,900	1,700
Alabama	11,344	10,700	9,800
Arkansas	1,640	1,500	1,400
Florida	34,433	32,400	29,700
Georgia	14,354	13,500	12,400
Kentucky	4,728	4,500	4,100
Louisiana	16,819	15,800	14,500
Mississippi	7,388	7,000	6,400
North Carolina	9,132	8,600	7,900

TABLE 5. Non-Catholic Non-Public Enrollment (K-12) - Estimated 1970 and Forecasts for 1975 and 1980 (continued)

State	1970	1975	1980
South Carolina	14,457	13,600	12,500
Tennessee	15,630	14,600	13,400
Virginia	31,267	29,400	26,900
West Virginia	865	800	700
Alaska	444	400	300
Arizona	5,708	5,500	5,100
California	99,262	94,200	87,900
Colorado	8,665	8,200	7,600
Hawaii	12,544	11,900	11,100
Idaho	1,779	1,700	1,500
Montana	1,435	1,400	1,300
Nevada	462	400	400
New Mexico	4,054	3,800	3,500
Oklahoma	2,481	2,300	2,100
Oregon	7,210	6,800	6,300
Texas	28,034	26,400	24,200
Utah	951	900	800
Washington	12,398	11,800	11,000
Wyoming	257	200	100
Total	914,793	845,300	763,900

IV. CONCLUSIONS

The basic results of this part of the study are summarized in Table 6. Total Catholic school enrollment is expected to decline 31.9 percent by 1975 and by 29.4 percent from 1975 to 1980. The non-Catholic schools are expected to decline at a significantly slower rate.

It is possible to over-estimate the impact on public school enrollment. For example, Catholic elementary school enrollment is predicted to drop by about 1,150,000, but part of this is due to a decline in the number of school-age children, so that only about one million extra students would be enrolled in the public schools.

The forecasts were made without direct consideration of the effects of tuition change, since it was argued that tuition changes had relatively little effect. However, tuition increases are implicitly subsumed in the time trend, for whatever effect they may have.

TABLE 6. Summary of Enrollment.

	1970		
	Elementary	Secondary	Total
Catholic	3,359,311	1,008,463	4,367,774
Non-Catholic	615,959	298,834	914,793
Total	3,975,270	1,307,297	5,282,567

	Forecasts			
	1975	Percent of 1970	1980	Percent of 1970
Catholic	2,972,745	68.1	2,098,000	48.0
Non-Catholic	845,300	92.4	763,900	83.5
Total	3,818,045	72.3	2,861,900	54.2

III. COSTS AND REVENUES OF NONPUBLIC ELEMENTARY AND SECONDARY EDUCATION: THE PAST, PRESENT, AND FUTURE OF ROMAN CATHOLIC SCHOOLS

Ernest J. Bartell, C.S.C.

CONTENTS

I. Introduction 213

II. Financial Structure of Catholic Schools 215

III. Some Comparisons 235

IV. Financial Projections 244

V. Three Strategies for Policy 251

VI. The Future 254

VII. Conclusion 276

Appendix B 552

I. INTRODUCTION

The now familiar financial pressure upon educational institutions in the United States has in many ways affected public and nonpublic education alike. Both have seen operating costs of education rise recently at more rapid rates than either incomes or general inflationary increases in the cost of living. Both have encountered inflationary rises in instructional expenditures due to increases in teachers' salary costs that have not been accompanied by equivalent cost saving technological improvements or labor saving innovations that can offset wage increases to some extent in other sectors of the economy. At the same time, the revenues of both public and nonpublic schools have failed to increase at the same rates as costs, often resulting in sizable operating deficits never previously encountered, or at least in the disappearance of financial cushions once taken for granted.

At the same time, the cost structure and financing of nonpublic elementary and secondary education are likely to be influenced by the characteristics of the specific institutional sponsorship of the schools. While virtually all nonpublic schools require tuition and fee payments from users, most sectarian schools also rely to a greater or lesser extent upon private contributions in money and services from Church members to keep monetary costs down and to finance expenses not covered by user charges. Contributions of services include the use of space and facilities provided by the sponsoring institution, but are most evident in instructional and administrative services contributed by Church members. Although virtually 100 percent of Catholic schools employ religious teachers at less than market salaries, samples of elementary and secondary schools operated by other religious sects suggest that approximately two-thirds of the sects accounting for about 85 percent of the non-Catholic sectarian school enrollment are also dependent upon the services of "low-salaried" teaching personnel. Even nonsectarian independent schools, which generally lack the supportive influence of a sponsoring institution, depend somewhat upon similar services, such that in a sample of 112 unaffiliated elementary and secondary schools, described in greater detail below, and employing 2,525 teachers, 9 percent of the teachers were classified by the schools as "low-salaried."

Catholic schools, which in 1970-71 accounted for approximately 83 percent of nonpublic school enrollment also tend to embody most of the economically distinguishable aspects of financial structure that characterize different forms of nonpublic education. Like virtually all nonpublic schools, Catholic schools depend principally upon user charges and financial contributions for most of their revenues. Private Catholic schools, often operated by financially independent religious orders, resemble many independent schools, and rely heavily upon tuition payments and cash contributions from families of pupils to meet expenditures. On the other hand, parochial and diocesan schools, like many other sectarian schools, cover their operating costs partly by user charges and partly by subsidy from the appropriate ecclesiastical jurisdiction, e.g., the parish or the diocese that sponsors them. At the same time, the cost structure of Catholic elementary and secondary education has been traditionally marked by cost saving devices of contributed teacher services and relatively high pupil/teacher ratios to a greater degree than independent schools and even most other sectarian school systems. Consequently, as will be seen below, operating costs per pupil of Catholic schools as a group tend to be lowest in the entire structure of elementary and secondary education in the United States, with expenditures per pupil of public schools and other sectarian schools lying somewhere between Catholic school costs and the operating costs of independent, unaffiliated schools, which, as a group, are highest of all.

II. FINANCIAL STRUCTURE OF CATHOLIC SCHOOLS

Since the American Catholic Bishops at the Third Plenary Council of Baltimore in 1884 set the goal of a Catholic school in every parish and a place for every Catholic child, Catholic schools operated by parishes and dioceses have been envisioned as quasi-public schools for all Catholic Children with no child to be denied admission for financial reasons. In the earliest years following the Councils at which policy guidelines were set for the establishment of schools, the use of tuition charges and fees to support the schools was explicitly discouraged in order to maintain the quasi-public character of the schools. At the same time, limitations on the fiscal capacity of a largely low income, immigrant Catholic population, and the availability at subsistence wages of large numbers of immigrant members of religious orders as teachers provided the basis for a relatively low-cost, no-frills system of education that has continued with its attendant strengths and weaknesses to the present day. However, the very cost advantages that made possible the widespread growth and survival of a form of mass education which would reach at its peak enrollment as many as one out of eight of all elementary and secondary pupils in the United States were to become a principal source of financial difficulties now faced by the Catholic schools in the 1970's.

Even before the numbers of religious teachers available to Catholic schools began to decline in the 1960's, the costs of maintenance of religious teachers began to rise appreciably due in large part to policies of upgrading educational qualifications of religious teachers that received great impetus through such movements as the Sister Formation Program during the 1940's and '50's. Since the religious orders are financially independent of the dioceses and parishes whose schools they staff, the increased costs of more professional religious teacher preparation and maintenance had finally to be reflected in increased payments from the parishes and dioceses to the orders and congregations of religious teachers, either in the form of higher religious teachers' salaries or of contributions from the churches to the religious orders. While religious orders themselves absorbed a portion of the increased costs to the point of imposing operating deficits on many of the orders, the average annual cash salaries paid by the Catholic schools to the religious teachers more than doubled in little more than a decade, from typical cash salaries of $700-900 in the mid 1950's to approximately $2,000 as a national average in 1970-71.[1]

Moreover, the desire by both a later generation of better educated parents and a corps of better trained religious teachers and school administrators for higher quality education was reflected in other educational cost increases and changes in such cost-sensitive variables as pupil/teacher ratios. Whereas classes of 70 pupils and average pupil/teacher ratios of over 40 to 1 were not uncommon in the postwar babyboom years through the 1950's, by 1970 the national average pupil/teacher ratio in Catholic elementary and secondary schools had declined to less than 27 to 1, partly as a result of expansion of educational facilities and services. Moreover, lay teachers' salaries, which had traditionally been low because of a dependence upon contributed services of the few dedicated lay people needed to supplement the services of religious teachers, began to increase. The increase in wage rates for lay teachers was due partly to increases in teacher salary schedules in the public sector, and to quality-induced diocesan policies to narrow the gap between Catholic and public schools salary schedules. Meanwhile, the voluntary character of enrollment demand in a nonpublic school system and developing attitudes favoring quality education by Catholic parents set limits upon administrative pressures to offset these cost increases by employment of less qualified teachers.

To add to the difficulty, the now familiar decline in the numbers of religious teachers available to Catholic schools coincided both with increased pressure for costly quality improvements in Catholic education as well as with inflationary trends in lay teachers' salaries and auxiliary cost increases that have affected nonpublic and public education alike. Between 1967 and 1970 alone the total number of male and female religious teachers in Catholic schools declined over 15 percent, from 95,602 to 80,312, according to NCEA figures. The decline in the number of active religious teachers is partly due to resignation of many from religious order membership. However, survey data of religious orders indicate an even more drastic drop off in entrance of new members with a resulting relatively rapid increase in the average age of remaining active religious teachers. Thus, a relatively high rate of decline in the numbers of available religious teachers is expected to continue, even if actual departures of active teachers from religious order membership should level off. Meanwhile, instructional and administrative positions left vacant by the shortage of relatively low cost religious teachers had to be filled with high cost lay teachers at the very time that lay teachers' salaries were rising at unprecedented rates and just as the quality and rationale of Catholic schools being subjected to critical scrutiny with unprecedented intensity. (Appendix B).

Under these circumstances, it is not surprising that operating costs per pupil in Catholic schools have risen at rates exceeding those in the public sector during the 1950's and 1960's. During the four years for which national financial data have been collected for United States Catholic schools, that is, between 1967-68 and 1970-71, operating costs per pupil have risen approximately 66 percent in Catholic elementary schools and approximately 42 percent in secondary schools. (Table 1 and Appendix B). National financial data are not available prior to 1967-68 for Catholic schools. However, private sources for two well established relatively large diocesan school systems with reasonably dependable accounting, one in the middle West, Youngstown, and one in the far West, San Francisco, indicate almost identical rates of increase in parochial school operating costs per pupil of just under 400 percent in the period from 1957-58 and 1970-71, years during which the cost pressures described above were converging cumulatively. During the same period, operating costs per pupil in average daily attendance in the public schools of the nation increased slightly less than 250 percent. (Table 2).

The combination of decline in enrollments analyzed elsewhere in the present study and of rising costs is reflected in substantial declines of capital expenditures for expansion and replacement of existing facilities. Annual capital expenditures on new buildings declined 45 percent in three years, from 31.7 million dollars in 1967-68 to 17.5 million in 1969-70. (Appendix B). At the same time, however, annual expenditures classified as "improvements" to existing facilities increased at about the same rate, 45 percent, during the same period, from 12.1 million dollars to 17.5 million dollars. This pattern could

TABLE 1

COSTS AND REVENUES PER PUPIL, U.S. ROMAN CATHOLIC SCHOOLS[1]

	1967/68	1968/69	1969/70	1970/71 (budgeted)
Elementary				
Operating Costs	$145	$178	$200	$238
Tuition and Fees	32	43	42	70
Deficit per Pupil	113	135	158	171
Secondary[2]				
Operating Costs	$335	$382	$434	$529
Tuition and Fees	230	263	300	353
Deficit per Pupil	105	119	134	176

---

[1] Source: NCEA Data Bank Statistical Reports for 1967-68, 1969-70, 1970-71. Yearly differences may be influenced by differences in levels and forms of response to NCEA Data Bank requests, but these differences are not judged to alter the aggregate qualitative changes described in the text.

[2] Secondary school data for all years relate to diocesan, parish and private schools.

TABLE 2

Operating Costs Per Pupil Of Parochial Schools In Selected Areas

Parochial Elementary Schools Per Pupil Enrolled:	1958-59	1963-64	1970-71	% Change 1958-1971
Youngstown, Ohio	$ 68 [1]	$ 92[1]	$ 259 [2]	381%
San Francisco, Calif.	68 [1]	92 [1]	257 [2]	380%
U.S. Elementary and Secondary Public School Expenditures Per Pupil ADA	$341 [3]	$460 [3]	$ 832 [4]	254%

1. Sources: E. Bartell, C.S.C., Costs and Benefits of Catholic Elementary and Secondary Schools (Notre Dame Press, 1968) and NCEA Data Bank.

2. Data for 1970-71 are estimates for urban schools outside the Center City only. Differences in averages for Center City and suburban schools did not exceed $50 per pupil.

3. Source: NCES, Digest of Educational Statistics.

4. Source: NCES, Projections of Educational Statistics to 1979-80.

reflect an attempt to counteract enrollment declines through quality improvements in facilities, or perhaps they simply reflect decisions to refurbish facilities that in more prosperous times would have been replaced.

Operating costs of Catholic schools have historically been remarkably uniform across regions. In the two case studies cited in Table II for which reasonably comparable time series data were available, costs per pupil in parochial schools not only increased at almost the same rates over the period from 1957 to 1970, but also were virtually identical in absolute amounts in 1957, again in 1963 and in 1970. The reasons for such uniformity, especially in earlier years, are not purely coincidental. Much can be explained by a historical uniformity in educational services offered by parochial and diocesan Catholic schools, particularly when educational policies concerning school construction facilities classroom size and other cost variables in each diocesan school system were determined centrally by ecclesiastical administrators, many of whom shared relatively common educational and administrative backgrounds. Often, regional differences in price levels and salary schedules for lay teachers could be largely offset by such cost sensitive variations in administrative policy as more vigorous recruitment of and reliance upon low salaried religious teachers.[2]

Despite the recent pressure of rapidly rising costs, considerably uniformity has also been maintained in amounts and sources of revenue. User charges, in the form of tuition and fees, although beginning to rise somewhat irregularly across dioceses, still reflect the historical consensus among the Bishops of the country concerning the quasi-public character of Catholic schools. Thus, despite recent cost pressures, tuition receipts at the elementary level still account nationally for less than 30 percent of elementary school operating costs, i.e., for approximately $70 against a 1970-71 budgeted per pupil expenditure of $241.[3] (Table I and Appendix B) Uniformly low tuition charges help preclude the possibility of exceptional variations in school expenditures across regions.

Finally, the uniform structure of diocesan and parochial organization across the country has helped to determine a relative uniformity in the sources and levels of ordinary parish or local church income available through contributions to subsidize school operating deficits. Hence, institutional constraints upon educational diversity, cost determinants and revenue sources can largely account for the relative uniformity in expenditures per pupil in Catholic elementary schools across the country.

On the other hand, at the secondary level where the schools are not attached to individual parishes and hence less constrained by parochial revenue sources and more subject to independent educational policy of the religious orders that staff them there has historically been somewhat less uniformity in operating costs and revenues per pupil, with tuition and fees averaging almost 60 percent of budgeted operating expenses in 1970-71. Least constrained of all by the limitations of relatively uniform institutional policy among dioceses are the independent schools operated under Catholic auspices, such as, private academies owned and operated by religious orders. Without any traditional objectives of quasi-public educational services, these private schools have been relatively free to vary tuition charges and hence to vary expenses per pupil accordingly. Thus, in 1970-71 private Catholic secondary schools across the United States expected to collect average tuition per pupil of $436, compared with an average tuition charge of $243 in diocesan and parish secondary schools. The larger tuition charges of the independent schools were expected to be sufficient to cover over 70 percent of operating expenses per pupil, which in 1970-71 were budgeted at $613 compared with $481 in the diocesan and parish secondary schools.[4]

The historical uniformity among Catholic schools has been somewhat weakened in recent years because of regional variations both in the converging educational and economic forces described here and in policy responses to these changes. Current variations by state in elementary and secondary school operating expenditures per pupil are evident in the supplementary volumes to this report. Still, it is safe to say, as a result of historical uniformity, no single area is currently free from the cost pressures that currently threaten the traditional financial structure and viability of the Catholic schools.

The vulnerability of the historical cost structure to change has its parallel on the side of revenues, as mentioned briefly above. That portion of operating expenses which is not covered by user charges in the form of tuition and fees must be and has been covered principally by voluntary contributions made either directly to the school or to the parish, diocese or religious order that sponsors the school. At the elementary level, because of the close identification of the school with the parish that sponsors it, direct gifts to the school, usually from the parents and other parishioners, account for only slightly more than 1 percent of school operating expenses.[5] Operating expenses are thus met almost entirely by a virtually automatic subsidy from the general collections of the parish, the principal source of revenues for all activities of the local church.

On the other hand, as suggested above, the relatively high cost of secondary education and the fact that most secondary Catholic schools are now regional in scope and not any longer linked to particular local parishes contribute to the higher coverage of secondary school operating expenses by user charges. While the $58 national average annual tuition charge in parochial elementary schools covered less than 25 percent of 1970-71 budgeted operating expenses per pupil, the $243 annual tuition charge in diocesan and parish secondary schools covered over 50 percent of operating expenses. Still, the remaining operating deficits of diocesan and parochial secondary schools, typically as large in absolute dollar values per pupil as elementary school deficits, must be covered out of subsidies that originate in the revenues of the local parish church, usually according to some diocesan assessment formula. Private schools, on the other hand, must usually depend upon subsidies from religious orders, whose revenue sources have been much less extensive and secure than those of the local parish churches. Hence, it is not surprising that tuition accounts for over two-thirds of relatively high operating expenses of the private secondary schools.

Ordinary parish revenues, the principal source of funds for subsidy to Catholic elementary and secondary schools has, during the current period of converging inflationary cost pressures, failed to increase at rates comparable to cost increases, or even at rates comparable to increases in the dollar value of national income. National data are not available for estimation of operating income of parishes and dioceses. However, a 5 percent national sample of parish income data by NCEA in 1971 has revealed a growth in parish incomes of only 15 percent over the six year period between 1965 and 1970 inclusive, for an average annual increase of only 2.5 percent, compared with average annual rates of increase of 7 percent in gross national product and of over 12 percent in operating costs per pupil in Catholic elementary and secondary schools during the same period. Moreover, one-third of the dioceses in the sample actually reported a decrease in revenues of their parishes from 1968 to 1969, although this decrease was almost universally reversed in the following year to the extent that the annual average rate of increase in revenues from 1969 to 1970 for the entire sample was highest for any single year in the survey. Nevertheless, the recent low average rates of increase of revenues in this sample are confirmed in confidential surveys of parish revenues in specific dioceses for which longer time series data were available.

Since parish revenues have not kept pace with parochial school costs, the percentage of total parish revenues absorbed by school operations has continued to rise. In the NCEA sample cited above, school operating expenses are estimated for 1970 to have risen to 52.9 percent of total parish operating revenues, including school revenues, and previous studies have indicated considerable uniformity in this rate.[6] Hence, accepting 53 percent as an average and allowing for tuition, fees and miscellaneous school income to account for 30 percent of elementary school operating costs, the parish subsidy necessary to cover the remaining elementary school deficit is currently likely to absorb on the average 37 percent of ordinary parish revenues collected for all purposes.

Out of ordinary parish revenues, which include earmarked collections for special purposes and revenues for transfer out of the parish, e.g., to meet diocesan assessments, only 60 to 65 percent may ultimately be available for unrestricted use, such that operating deficits of the parish elementary schools may actually absorb approximately 60 percent of available parish revenues.[7] The parish commitment to education is even greater when it is realized that there are also included in restricted and special purpose parish revenues the diocesan assessments to subsidize operating deficits of diocesan secondary schools. Individual parish assessments for secondary education vary according to the particular assessment formula in use. If, however, based upon NCEA data, the national average operating deficit per pupil in diocesan and parochial high schools to be subsidized equals approximately 80 percent of the corresponding elementary school deficit per pupil, and if the number of secondary school pupils in Catholic diocesan and parochial to be subsidized is approximately 25 percent of elementary enrollment, an average additional share of parish revenue equal to 20 percent of parish revenues needed for elementary school subsidy will be required in one form or another to meet the deficits of the secondary schools. Thus, typically almost 60 percent of all operating parish revenues may be ultimately consumed in subsidy of Catholic elementary and secondary education. Finally, if allowance is made for the fact that, on the average, 15 percent of parish revenues for all purposes is accounted for by user charges, i.e., tuition and fees, in the parish elementary school, the actual commitment of the parish to Catholic elementary and secondary education rises to 75 percent of parish income for all purposes. Expressed differently, Catholic parishes spend on the average three times as much for education as for all other purposes combined.[8]

From financial data alone it is impossible to specify the reasons for lagging growth in the parish revenues necessary to subsidize school deficits. Inadequate institutional devices to tap the growing ability to pay of increasingly affluent Catholic families may be a partial explanation. Sunday collections, bazaars, games and other traditional fund raising devices which may once have been sufficient to reach the resources of a relatively homogeneous, low income

Catholic community tend to be regressive as both the range and average level of Catholic family incomes increase. The family whose income doubles over time probably does not double its habitual deposit in the Sunday parish envelope collection.

More serious, however, is the possibility of changes in American Catholic taste patterns with respect to institutional Church affiliation. Declines in formal Church membership and participation in Church related activities have been reported in recent years by independent polls and in statistical reports on individuals as sects. Because of the heavy commitment of Catholic parishes to education, such that 75 percent of Catholic parish income may be consigned to elementary and secondary education, a decline in parish collections may be attributed as much to changing attitudes towards Catholic schools as to changing attitudes towards fundamental religious affiliation. Hence, some of the same taste factors contributing to the current decline in Catholic school enrollment may also contribute to the decline in Church revenues out of which the schools are subsidized.

As a consequence, it is not clear what effect abandonment of Catholic education would have on the total ordinary revenues of local Catholic churches. While the financial burden of traditional Catholic education on the parish may have become nearly insupportable, it might be argued that church revenues for all purposes would be less affected by restoration of confidence in Catholic education, e.g., through quality reforms and innovation, than by total abandonment of the work that has historically represented by far the largest resource commitment of the Catholic Church in the United States.[9]

Nevertheless, growth of church revenues at lower rates than the growth of Catholic family incomes has resulted in relatively smaller burdens of overall church support for Catholic families. While biblical tithing may have demanded 10 percent of family incomes, contemporary Catholic families, as measured by parish registrations, typically contribute to the operation of their local churches at rates that average only about 2 percent of gross family incomes, a rate that has been rather uniformly verified in several independent surveys (Table 3). This means that if approximately 60 percent of parish operating revenues are allocated to school subsidies, the contribution of Catholic families to the support of their diocesan and parochial school operations averages less than 1 1/4 percent of Catholic family incomes, exclusive of charges for capital expenditures and of tuition and fee payments by school users.

Moreover, this rate tends to remain relatively uniform among income brackets with a small degree of regressivity observable, so that on the average families in low income areas tend to contribute to their churches somewhat higher shares of their incomes than those in higher income brackets. Thus, in St. Louis it was found that, if the parish with the highest average levels of family income had tapped the ability to pay of its parishioners at the same rate as the parish with the lowest level of family income, annual operating

TABLE 3

AVERAGE SHARES OF FAMILY INCOME CONTRIBUTED TO PARISHES WITH SCHOOLS

FROM SELECTED STUDIES

	Denver (1969)	St. Louis (1970)	Indianapolis (1968)
Diocesan Average	2.2%	2.0%	2.1%
Parish With Highest Family Income	1.0%	1.6%	1.8 - 2.3%
Parish With Lowest Family Income	3.6%	2.4%	2.5%

Sources: Denver _op_. _cit._, St. Louis, _op_. _cit._, Indianapolis, _op_. _cit._

revenues of the former would have increased by $500,000. The regressivity in economic burden is actually greater than the regressivity in nominal rates of contribution, because such contributions are deductible from income taxes which are collected according to a progressive schedule. In effect, the federal government pays a larger share of the church contribution made by the rich man than of the church contribution made by the poor man.

This regressivity may perhaps be partly explained by differences in preferences for institutional church affiliation among income groups. However, the regressive bias in techniques of fund raising probably operates cross-sectionally as well as over time. The $50,000 a year executive's wife probably does not play ten times the number of Bingo cards as the spouse of the $5,000 a year laborer.

It should be noted, however, that the relative uniformity of these averages may well conceal wide variations within individual income classifications, such that a small, relatively active percentage of registered parishioners may bear a disporportionate share of the total financial burden of the parish. This type of variation, commonly mentioned by pastors, may reflect both changing religious tastes of church members as well as inadequacy of traditional methods of fund raising. However, even if only 50 percent of registered parishioners are responsible for 100 percent of parish contributions, school support would represent only 2.5 percent of family incomes, assuming levels of family income to be randomly distributed. Finally, the regressivity of fund raising among parishes in neighborhoods with differing average levels of family income reflects the traditional laissez faire system of public finance among Catholic parishes, whereby each has been principally responsible only for its own solvency. A wealthy parish that was meeting its own obligations simply had no further incentive to tap the ability to pay of its parishioners.

In the absence of diocesan tax and transfer machinery for income redistribution within the diocese, or among dioceses of the nation, differentials in family incomes are likely to be reflected in inter-parochial differences in school operating expenditures per pupil, with resulting potential inequities of educational opportunity. Nationally, classification of schools by modal income of Catholic families responsible for their support indicates that tuition, subsidies, school expenditures and lay faculty salaries rise in almost perfect rank correlation with modal family income classifications.[10] (Table 4) School expenditures per pupil that are 90 percent higher in the wealthiest schools than in the poorest schools reflect the absence of a mechanism for financial redistribution among parishes.

However, the dollar differential does not accurately represent the differential in educational inputs, because of the varying proportions of low salaries religious teachers and hence the varying proportions of contributed instructional services among schools serving families at different social economic levels. As indicated in Table 4, there is perfect inverse rank correlation between the ratio of religious teachers to lay teachers and average levels of

TABLE 4

CATHOLIC SCHOOL COSTS AND REVENUES RELATED TO FAMILY INCOME DISTRIBUTION[1]

	per pupil				
Family Income	Tuition and Fees	Subsidy	Total School Expenses	Average Lay Teacher Salary	Ratio of Religious to Lay Teachers
Under $5,000	$ 63	$104	$225	$5,240	1.27
$5,000 - 9,999	61	132	228	5,751	.98
$10,000 - 24,999	93	142	271	6,342	.75
$25,000 and higher	242	151	415	7,308	.61
TOTAL	70	132	241	5,850	.92

Source: Reproduced from Table 33, NCEA Data Bank Report, 1970-71 income of families served by the Catholic schools Thus the allocation of low cost religious teachers and the contribued service they provide can and apparently do act as a mechanism for redistributive machinery in the essentially laissez faire economic structure of the parishes in the typical Catholic diocese.

The administrative assignment of relatively highly qualified, but low cost religious teachers to inner-city schools as a redistributive device to achieve social goals if further verified in specific case studies in Youngstown and St. Louis.[11] In St. Louis, for example, contributed services were explicitly valued as the dollar difference between the imputed market value of religious teacher services according to rank and experience as priced in local public school salary schedules less the actual salaries and cash expenditures borne by the Catholic schools for religious teachers. When contributed services were thus valued for all Catholic schools in the diocese, it was found that inner-city Catholic schools, which incurred the lowest average per pupil cash costs in the schools of the diocese, actually were committing resources with a higher value per pupil than the schools in any other area of the diocese except the wealthiest residential and suburban parishes, which had higher cash costs per pupil, but approximately equal total resource costs with contributed services explicitly evaluated.

III. SOME COMPARISONS

Within the framework of institutional change that has been described here, Catholic elementary and secondary schools in 1970-71 enrolled over 4.3 million pupils, approximately 83 percent of all non-public school enrollment, at an annual operating cost of approximately 1.3 billion dollars, exclusive of capital expenditures and debt service. Despite current cost pressures described above, dollar operating costs per pupil are still significantly lower than those of public schools and as nearly as can be determined, those of most other nonpublic schools, sectarian and non-affiliated. Cost comparisons among school systems as diverse in purpose, clientele, organization and accounting techniques are necessarily tenuous. Furthermore, for the present study, no systematically collected national financial data for non-Catholic nonpublic schools comparable to those available for analysis of public and Catholic schools were made available to investigators. A national survey of non-Catholic nonpublic schools based on a survey instrument compatible with that used by NCEA for Catholic school data has been completed under contract for the U.S. Office of Education. However, these data were not made available for the President's Commission study, thereby curtailing severely both financial analysis of non-Catholic nonpublic school systems as well as comparisons between the two.

Nevertheless, some general comparisons requiring less precision are possible from limited available data. The costs per pupil in Table 5 are based upon a small 1969 national sample of 271 elementary and 166 secondary nonpublic schools as part of A Study of The American Independent School, in which operating expenditures per pupil in Catholic schools sampled are

TABLE 5

SELECTED FINANCIAL STATISTICS

NON-PUBLIC SCHOOLS 1968-69

	Per Pupil Costs	Per Pupil Costs in Catholic Schools as a Percentage of Other Per Pupil Costs	
	(1)	(2) Sample A	(3) Sample B
1. Roman Catholic			
Elementary	$152	100%	100%
Secondary	349	100%	100%
2. Other Sectarian			
Elementary	$320	48%	27%
Secondary	887	39%	38%
3. Non-affiliated			
Elementary	$1,158	13%	11%
Secondary	1,517	23%	20%
4. Public			
Elementary and Secondary Combined	$655	36%*	

*Based upon NCEA Data Bank cost data for Catholic elementary and secondary schools weighted by enrollments in public elementary and secondary schools.

Sources: 1, 2, 3 of Sample A, survey data from A Study of the American Independent School (Otto F. Kraushaar, Harvard University Graduate School of Education, director) as collated and reported by Boston College, New England Center for Education Research; 4. NEA, Estimates of School Statistics, 1969-70.

1, 2, 3 Sample B, New York State Commission for Elementary and Secondary Education 1971.

approximately 10 percent lower than those based on the more complete data of the NCEA DATA BANK. Nevertheless, the relationships of Catholic school expenditures to those of other sectarian and non-affiliated schools, as indicated in Column 2, are surprisingly close to those based on a virtually complete 1971 sample of 486 non-Catholic nonpublic schools for the New York Governor's Commission on Elementary and Secondary Education as indicated in Column 3, enhancing the reliability of simple comparisons, if not of absolute levels of expenditures. Only the relationships between Catholic elementary schools and other sectarian elementary schools differ substantially between samples. However, this is reasonable because of considerable variation among sects in per pupil expenditures. United Methodist Schools, for example, report national elementary school expenditures per pupil of $1231 for 1968-69, while Missouri Synod Lutheran Schools, which in the same year accounted for over 35 percent of all non-Catholic sectarian school enrollment in the nation, averaged only $333 per pupil in elementary schools.

With this important reservation about the diversity of expenditures per pupil in sectarian schools, Catholic schools appear to spend considerably less per pupil, averaging between 25 and 50 percent of the expenditures per pupil of their sectarian counterparts in elementary schools, and just under 40 percent in the secondary schools. Part of this variation is due to differing proportions of contributed services per pupil among schools of different sects. In the New York State Survey of sixteen Protestant and

Jewish sects reporting the operation of elementary schools, only ten or slightly more than half the sects reported the explicit employment of "low-salaried" teachers providing contributed services economically comparable to those of religious teachers in Catholic schools. Among ten non-Catholic sects reporting high school operations, only two acknowledged similar services. Moreover, among the elementary schools, only Jewish schools accounting for 25 percent of non-Catholic sectarian schools and three Protestant sects accounting for 9 percent of that total employed a higher ratio of "low-salaries" teachers per pupil than the Catholic schools of the state. Among secondary schools, only the Hebrew schools indicated a higher percentage of such teachers than Catholic schools.

However, even those sects reporting higher percentages of low salaried teachers also all reported operating expenditures per pupil that ranged from approximately twice to six times as high as the state average for Catholic schools. In each of these sects, the ratio of pupils to total teachers, high salaried and low salaried was lower than in Catholic schools, as was the average pupil/teacher ratio for all non-Catholic sectarian schools. Although comparable data were not available nationally, the low ratio of Catholic school expenditures per pupil to those of other sects in the small national sample suggest similar relationships among pupil/teacher ratios. Perhaps for historical reasons associated with the original purpose of Catholic schools as a quasi-public system of mass education, Catholic schools appear still to spread their educational resources more thinly over a relatively large number of pupils than do their sectarian counterparts.

Similar relationships between Catholic schools and non-affiliated independent schools are even more pronounced, despite the wide variety of schools classified as non-affiliated. As indicated in both samples in Table 5, Catholic schools appear to spend only about 12 percent as much per elementary pupil as the independent schools and only slightly over 20 percent in the secondary schools. Again, a partial explanation may be found both in contributed services and in overall pupil/teacher ratios. Although some non-affiliated independent schools reported the services of "low-salaried teachers" in the 1971 New York State Survey, the numbers of these teachers pe pupil at the elementary level was roughly only one-half as great as in Catholic schools and much lower at the secondary level. Moreover, the overall pupil/teacher ratios of ten to one at the elementary level and twelve to one at the secondary level in the independent schools were as low or lower than those reported by any of the non-Catholic sects. The number of pupils per teacher in non-affiliated elementary schools averaged approximately 30 percent of the state-wide Catholic average and approximately 60 percent at the secondary level. Despite attempts in recent years to reduce class size in Catholic schools, these schools continue to be distinguished from their sectarian and non-affiliated counterparts by relatively high pupil/teacher ratios and by the relative uniformity of educational services and cost minimization that these ratios imply.

As indicated in Table 5, operating expenses per pupil in public schools fall somewhat midway between those in Catholic schools and those in non-affiliated independent schools, with cash expenditures for operations per pupil in Catholic elementary and secondary schools averaging slightly more than one-third of reported operating expenses for the public schools of the nation.[12] Since teachers in individual public schools are customarily compensated according to uniform salary schedules, a more appropriate comparison of resouce costs would impute a value for contributed services of religious teachers in Catholic schools on the basis of the opportunity cost of the teacher, that is, the market value of services of teachers with comparable qualifications and experience. It may be argued that contributed services are a fiction, since teachers are free to seek out the highest paid position available for their services. If they receive less, it could be that either they are satisfied with less and hence are receiving some intangible psychic income or that they are unable to command a higher salary and hence are worth in the market only what they are paid. Such reasoning may apply to relatively mobile lay teachers in Catholic schools, although even then it suggests the debatable proposition that any equally qualified counterparts in public schools receive less psychic income or satisfaction from their work and hence must be offered an offsetting monetary bribe. For the institutionally immobile religious teacher, the argument is clearly inapplicable in operation, as Catholic school administrators have learned in trying to hire comparably qualified lay teachers to fill the vacancies left by declining numbers of religious teachers.

For reasons of simplicity, the NCEA Data Bank calculates the value of contributed services of religious teachers on the basis of average lay teachers salaries in Catholic schools. (Appendix B) Because of the historical upgrading of religious teacher preparation and because of the relatively high cost of substituting lay teachers for religious teachers, religious teachers tend to be significantly better qualified in terms of academic degrees and teaching experience, which are the two principal determinants of financial increments in conventional teachers salaries schedules (Table 6). Hence, the NCEA figures for contributed services of religious teachers in 1970 of $69 per pupil in elementary schools and $168-207 in secondary schools understates the market value of these services. Individual case studies of diocesan school systems in Youngstown, San Francisco, Denver and St. Louis have indicated that, when valued at public school salary schedules for equivalent services, the contributed services of religious teachers represent a considerably higher percentage of cash costs. Hence, assuming that Catholic school lay teachers salary schedules are typically about 80 percent of local public school salary schedules and conservatively that religious teachers are at least equally well qualified as their lay peers in Catholic schools, resource inputs per pupil in Catholic schools valued at more comparable market prices would

TABLE 6

HIGHEST ACADEMIC DEGREE

FULL TIME TEACHERS

ROMAN CATHOLIC SCHOOLS 1970-71

	Elementary			Secondary		
	Religious	Lay	Total	Religious	Lay	Total
Less than B.A.	17.3%	34.5%	26.2%	1.6%	3.6%	2.5%
B.A.	63.4	61.1	62.2	39.4	71.9	54.9
M.A.	19.3	4.3	11.5	58.0	23.8	41.8
Doctorate	.1	.1	.1	.9	.6	.8
TOTAL	100%	100%	100%	100%	100%	100%

Source: Reproduced from NCEA Data Bank Report, 1970-71.

equal approximately 55 percent of cash expenditures per pupil in public elementary and secondary schools.[13]

Insufficient information precludes the further refinement of data necessary for detailed comparisons of the two forms of education. Inability to standardize for differences among the students served and their needs, differences in accounting procedures and differences in quantitatively elusive educational objectives make cost-benefit comparisons infeasible. More meaningful for current educational policy are comparisons of costs of continued operation of nonpublic schools and costs of absorption of Catholic school pupils into public school systems. Projectsions of costs, estimated revenues and deficits for continued operation of Catholic schools are considered in the following section, while estimates of costs of absorption of Catholic school enrollments into public schools are constructed elsewhere in the present study.

IV. FINANCIAL PROJECTIONS

Future deficits of Catholic schools will depend upon changes in the trends that have converged to create present financial difficulties. Changes in the supply and salaries of religious teachers, changes in the salary schedules and qualifications of lay teachers, inflationary increase in other school expenses, trends in church contributions will all influence future costs of Catholic education. So too will administrative policies by Catholic school decision makers concerning school closings and consolidations in response to projections of future enrollment declines as well as policies concerning changes in tuition rates and in cost-sensitive variables such as class size.

In order to make reasonable estimates of future deficits of Catholic schools and to test the relative sensitivity of school deficits to trends and policy decisions, a model has been developed to estimate projected Catholic school operating deficits in each of the United States for 1975 and 1980 at both elementary and secondary levels.[14] In addition, the model estimates requirements for public or other external aid based upon explicit assumptions about feasible limits of private financial support within the Catholic Church. The model embodies independent empirical estimates of key trend variables and a range of assumptions concerning deficit responsive policies by Catholic school administrators. Although projections to 1980 are as accurate as possible with available data the results for 1975 are to be considered generally more reliable.

Simulation experiments with the model showed projections of school deficits to be sensitive to certain assumptions and estimates whose current unpredictability requires allowance for a range of variations. The somewhat unprecedented recent federal counter-inflationary interventions in the economy make it difficult to predict inflationary trends affecting teacher salaries and other school operating costs. Moreover, it is difficult to predict the lasting effects on teacher salaries, if any, of the current excess supply of elementary and secondary school teachers throughout the nation.

On another front, sample time series data for ordinary parish revenues in several dioceses indicate an irregular pattern of declining rates of growth until about 1968 when some dioceses actually registered an absolute decline in total parish revenues. Thereafter, however, limited data from certain dioceses with more recent information available indicate a recovery that in some areas has been sufficiently great for the past two or three years to register record annual increases in revenues for the decade. Whether this recent reversal of earlier trends in Church support will continue is a matter of conjecture. Finally, future deficits will depend heavily upon policy strategies with respect to school closings taken by Catholic school administrators in response to declining enrollments. A range of these strategies is described in the following section.

Separate models of both elementary and secondary Catholic school operations have been constructed for the nation and for individual states under different combinations of assumptions regarding the less predictable determinants of costs and revenues. A "hard times" model assumes the worst about inflationary cost trends and declining Church revenues. A "good times" model assumes the best about both, and "fair times" models lie somewhere between. Moreover, each of these models is designed to project deficits under three strategies that might be taken by Catholic school administrators, two of which set approximate high cost and low cost limits on school operations, while the third projects a moderate cost strategy midway between the two.

The following trends are thus incorporated into deficit projections. In the "hard times" model increases in non-salary school costs are assumed to rise at the projected level of increase in the cost of living of 5 percent per year compounded annually to 1975 and 3 percent compounded thereafter to reflect inflationary trends in the U.S. economy. Public school teachers salaries are expected to rise at 6 percent per year compounded annually from levels given in the 1970 Digest of Educational Statistics. In the "good times" model, both public school teacher salary schedules and non-salary school operating costs are assumed to increase at average annual rates of 3 percent through the entire projection period.

On the basis of case studies and interviews with Catholic school administrators, Catholic school lay teachers salary schedules in both models are expected to reach 80 percent of parity with public school salary schedules by 1975 and 90 percent of parity by 1980. However, since the gap in average salaries for the nation is currently approximately 10 percentage points greater than the differential in salary schedules, it is further assumed that policies of upgrading Catholic school teacher qualifications will result in a halving of the additional differential by 1975, with no further deterioration as Catholic school salary schedules rise to 1980 levels. Thus, projected actual average lay teachers salaries are estimated to be 75 percent of public school salaries by 1975 and 85 percent of 1980 public school salaries, except where present salary levels are higher, in which case the higher percentage is expected to be maintained.

The numbers of religious teachers available for 1975 and 1980 are estimated by prediction with coefficients of a multiple regression equation fit to religious teacher data for the past decade. The equation used for estimation is given in Appendix B. Estimated salaries of religious teachers are drawn from a demographic and financial study made in 1970 at Notre Dame of twenty religious orders of teachers with special emphasis on the emerging inverted pyramid of dependency, that is, the growing number of dependent members, particularly of elderly and retired religious order members, to be supported by a dwindling base of active religious teachers. On the basis of this analysis the income a religious teacher would need in 1975 to cover personal maintenance comparable to present levels as well as a share of religious order expenses will be approximately $5,000. For 1980 it is assumed conservatively that this figure increases at the estimated rate of increase in the cost of living of 3 percent per year compounded annually.

Data for total church operating revenues of the parish churches that are responsible for subsidy of Catholic school deficits are not directly available for every diocese. However, as elementary school costs represent a surprisingly uniform percentage of total church revenues, an estimate of current church revenues was constructed from the 1971 NCEA Survey percentages mentioned earlier and confirmed by diocesan case studies.[15] These revenue data were then projected to 1975 and 1980 on the basis of trend curves fit to church revenue data for dioceses from which adequate time series data were made available to researchers. These results confirm a considerable leveling off of church revenues during most of the 1960's despite growth in Catholic family incomes. On the basis of analysis of these data the projected estimates of future parish operating revenues in the "hard times" model have been calculated as 102 percent of 1970 collections for 1975 and as 105 percent of 1970 collections for 1980 (Appendix B). However, on the basis of very recent high rates of increase in parish revenues recorded by dioceses, the "good times" model assumes an average annual increase of 3 percent in revenues throughout the period.

In addition, a twofold assumption has been made in relation to Catholic school administrative policies concerning tuition and fees. Partly for lack of data and partly because tuition charges in Catholic schools, particularly at the elementary level, has been historically negligible, no satisfactory empirical analysis of either the price elasticity or income elasticity of demand for Catholic schooling has been made. On one hand, many Catholic school administrators argue in interviews that any further increases in user charges will be a serious deterrent to enrollment demand and will lead to a small elitist school system, implying significant negative price elasticity of enrollment demands. On the other hand, in econometric analyses at Notre Dame of elementary school enrollment demand, present and past tuition charges failed to exercise a significant independent influence on changes in enrollment. Furthermore, it is conventional to assume on the basis of historical experience in the United States that, as family incomes increase, the share of increases in income spent on education will also increase, more than proportionately, implying income elasticity of demand for education greater than unity. However, it is not likely that the income elasticity of demand for a single form of education with close substitutes would be as great as that for all of education.

Indeed, there is some evidence that enrollment demand may be falling fastest in the areas of highest Catholic family incomes, probably because Catholic schools in those areas, although perhaps the best provided within a diocesan school system in terms of resource inputs, are still relatively inferior to their adjacent high income public schools. Catholic schools in lower income areas on the other hand, although inferior to the best in the Catholic system, are still closer in quality or even superior to their public sector competition. In such a situation, particularly in light of the relatively small shares of average Catholic family incomes committed to school support, the demand for Catholic education could still be positively responsive to family income, but only for a quality of education that is perceived by Catholic families to be commensurate in some way with available substitutes.[16]

If Catholic schooling were inevitably an economically inferior good with respect to increases in Catholic family income and subject also to highly negative price elasticity, no statistical projections would be necessary to predict the quick demise of Catholic elementary and secondary education. It seems more plausible for purposes of reasonable projections to assume net price and income effects equivalent to unitary income elasticity of demand for Catholic schools on the part of school users, such that tuition rates can be raised at rates equal to the rise in family incomes, assumed to be 6 percent annually, so that the economic burden of tuition on ability to pay of Catholic parents, rather than the absolute price, is no greater than at present.

V. THREE STRATEGIES FOR POLICY

Enrollment projections are taken directly from the enrollment component of the present study. These projections show declines in enrollment for both 1975 and 1980. Hence, costs and deficits will be affected by assumptions made concerning policy response to declining enrollments. In order to cover a reasonable range of responses, three separate assumptions and resulting projections have been developed. The low cost strategy (full consolidation projection) assumes at one extreme that Catholic school administrators are able to consolidate schools and classes to such an extent that pupil/teacher ratios can be maintained at relatively high 1970 levels despite enrollment declines. The high cost strategy (zero consolidation projection) on the other hand assumes that all schools are kept open in spite of enrollment declines and with corresponding declines in pupil/teacher ratios. Finally, a moderate cost strategy (partial consolidation projection) assumes some school consolidation with some reduction in class size, which allows both for institutional obstacles to complete consolidation and for the possibility of quality innovations that might require lower pupil/teacher ratios in order to retain loyalty of remaining school supporters. For this projection, pupil/teacher ratios midway between those in the limiting low cost and high cost projections were chosen. No explicit attempt has been made to determine the actual number of schools that would remain open under each of the policy strategies, except to assume constant average costs per pupil, an assumption that is consistent with available case study analysis concerning economies of scale among the relatively uniform facilities of Catholic schools over relative ranges of enrollment. If variations in school size are randomly distributed, it can be reasonably assumed that the numbers of schools closed under each of the three strategies will be directly proportional to the declines in enrollment and inversely proportional to declines in pupil/teacher ratios under two of the options.

In addition to operating deficits, a separate, admittedly crude, estimate has been made of average annual capital expenditures required to replace depreciated facilities under each of the three policy assumptions.

These estimates are based upon reproduction values of school buildings from NCEA sample data and an assumed forty-year life of facilities evenly distributed over time. Extrapolation from the sample data will be accurate in direct relation to the relative uniformity of Catholic school facilities across the nation (Appendix B).

For each of these three policy alternatives a final calculation is made of the amount of public or other external subsidy per pupil that would be required if the total subsidy by local parish churches to the elementary and secondary schools of their diocese is to be no greater a burden on future operating revenues of parish churches than at present. Since generally elementary and secondary school deficits are ultimately met by a subsidy from ordinary local church revenues, this calculation of necessary external aid or public subsidy is based upon the assumption that the percentage of ordinary parish income allocated to meeting school deficits shall be no greater than at present (Appendix B).

VI. THE FUTURE

Given resonable projections concerning enrollments and the supply of religious teachers, as well as plausible estimates of other variables affecting costs and revenues, the projected rate of increase in cost and deficits per pupil in Catholic schools is not likely to be exceeded elsewhere on such a wide scale in the public and nonpublic sectors of elementary and secondary education. Nor does it appear likely that the Catholic school systems of the country will survive in the institutional form and on the scale which have characterized them through recent decades, if they must depend upon traditional sources of financial and human resources. On the other hand, the evidence suggests that a contracted Catholic school system may be economically feasible, though not necessarily attractive to decision makers and parents within the Catholic community. The very fact of school closings in response to declining enrollments may exercise a feedback effect which could bring about a virtual collapse of Catholic school systems before these projections have been realized.

As indicated in Table 7, the projected declines in the numbers of available religious teachers are greater than the declines in projected enrollments at both the elementary and secondary levels for 1975 and 1980, resulting in a steady rise in the ratio of pupils to religious teachers to more than twice the 1970 levels by 1980. This trend has serious implications, both for school costs and for the quality of Catholic education in terms of average teacher qualifications and perceived identity of Catholic schools, which is so closely associated with the presence of the religious teacher in the classroom. Depending upon the strategy adopted by decision makers concerning consolidation of classes and schools in the face of declining enrollments, by 1980 there may be no more than the equivalent of one religious teacher for every four classes and perhaps as few as one for every ten, less than one per school of typical size.

The projected inflation in operating costs per pupil depends heavily upon the strategy taken by Catholic school decision makers with respect to school closings and the maintenance of earlier levels of pupil-teacher ratios in the face of declining enrollments. However, even if full consolidation, as defined above, is achieved, total operating costs of Catholic elementary and secondary schools are likely to rise under "hard times" assumptions from approximately 1.3 billion dollars annually in 1970 to about 1.7 billion in 1975 and, under the influence of declining enrollments, leveling off to about 1.8 billion in 1980 (Table 7, columns 2, 5). The largest increase in total operating costs, about 1/3 above present levels, is thus likely to occur in the first half of the decade, imposing considerable urgency upon proposals for support measures.

Since perfectly efficient consolidation of classes and facilities is unlikely on such short notice, projected costs under the assumed

TABLE 7

National Projections of Catholic School Costs and Revenues

"Hard Times" Model

		1975			1980		
	1970 (1)	Low Cost Full Consolidation (2)	Moderate Cost Partial Consolidation (3)	High Cost Zero Consolidation (4)	Low Cost Full Consolidation (5)	Moderate Cost Partial Consolidation (6)	High Cost Zero Consolidation (7)
Elementary							
Enrollment	3.36 million	—	2.15 million	—	—	1.41 million	—
Ratio of Pupils to Religious Teachers	64.5	—	85.0	—	—	131.9	—
Operating Costs per Pupil	$238	$500	$633	$841	$687	$978	$1,645
Total Operating Deficit	$566.0 million	$875.7 million	$1,162.0 million	$1,609.3 million	$792.5 million	$1,202.6 million	$2,314.9 million
Secondary							
Enrollment	1.01 million	—	.822 million	—	—	.690 million	—
Ratio of Pupils to Religious Teachers	35.4	—	46.8	—	—	72.6	—
Operating Costs per Pupil	$494	$912	$1,028	$1,169	$1,226	$1,461	$1,798
Total Operating Deficit	$186.4 million	$410.3 million	$505.2 million	$621.6 million	$464.1 million	$626.9 million	$858.9 million
Percentage of Ordinary Church Revenues Required for Elementary and Secondary School Subsidy	59	99	128	171	94	136	224
External Aid Required per Pupil, Elementary and Secondary	----	$175	$303	$492	$222	$495	$1,053
Required Replacement Capital Expenditures per Pupil	$51	$47	$56	$68	$46	$61	$91

strategy of partial consolidation are probably a better estimate of future costs of operation. Under this strategy, in which pupil-teacher ratios are allowed to fall partially to absorb some of the decline in enrollments through smaller class size, the projected rise in operating costs is correspondingly more rapid. If pupil-teacher ratios are allowed to fall by 1980 to 21.3 to 1 in elementary schools and 15.6 to 1 in secondary schools, that is, halfway to their potential minima in the existing systems, total operating costs can be expected to rise almost 70 percent to 2.2 billion by 1975-6, leveling off at 2.4 billion by 1980 (Table 7, columns 3, 6). Again, the urgency of prompt measures for financial support is evident.

If, on the other hand, decision makers attempt to maintain virtually all existing schools, by absorbing enrollment declines in smaller class sizes and lower pupil teacher ratios, the escalation in costs, due largely to the need for an exceptional number of lay teachers in small classes, becomes exorbitant. With pupil-teacher ratios in elementary schools falling by 1980 to 12.6 to 1 from present levels of 30 to 1 in elementary schools and in secondary schools down to 12.7 to 1 from 18.5 to 1, annual total operating costs in the "hard times" model skyrocket over 200 percent to 2.77 billion by 1975 and almost 270 percent to 3.55 billion by 1980 (Table 7, columns 4,7). Moreover, nearly 200 million dollars additional capital funds would be required merely for replacement of plant and equipment. In the "hard times" model it would require well over twice the total projected revenues of the local churches merely to meet the projected deficits of Catholic elementary and secondary schools. Even the somewhat more favorable estimate of church revenues in the "good times" model still does not provide feasible levels of private subsidy. Clearly, the feasibility of maintaining the traditional scope of mass education for Catholic children in the face of declining enrollments is remote.

On the other hand, under the first strategy and under the more likely second strategy of moderate levels of reduction in pupil-teacher ratios, which allow for some potential labor-intensive quality innovations along with some more feasible degree of consolidation than in the perfect consolidation alternative, an interesting possibility emerges. It is sometimes claimed that external or public aid is realistically transitional, that is, an aid to the orderly phase-out of nonpublic schools faced with an endless escalation of costs. The evidence from the projections, however, suggests the possibility of some stabilization. Given sufficient aid to meet the rapid escalation of costs in the first half of the decade, the relative leveling off of total costs in the latter half of the decade because of enrollment declines, even in the face of the slow growth in revenues in the "hard times" model, result in total deficits that hold relatively steady as a percentage of church revenues through the last half of the decade. Under the assumptions of "good times," particularly with respect to church revenues, the deficit would actually decrease relative to the ability of parishioners to subsidize the schools.

Although certainly in the "hard times" model it is not likely that the church could sustain even the stabilized deficit, at least the amount of external aid needed to keep the system alive would not increase appreciably, and could actually stabilize or decrease, depending upon the ability of the churches to maintain a growth rate in general revenues at even a fraction of the expected growth in family incomes. This possibility exists even when examined on the more rational basis of required aid per pupil, since of course the public sector must also bear the cost of absorbing the decline in Catholic school enrollments within the public school system.

If the private church subsidy is held to the current percentage of ordinary church revenues, the required external subsidy per elementary and secondary pupil as defined in the previous section would be approximately $303 in 1975, rising to an average of almost $500 per pupil in 1980 under the "hard times" assumptions and the moderate-cost, partial consolidation strategy (Table 7, columns 3, 6). Although high, these amounts are well below projected average operating costs of elementary and secondary education in the Nation's public school systems.

Moreover, if church revenues can be stimulated to rise at the rate of three percent per year, well below the expected rate of increase in family incomes, and if inflation controls limit cost increases according to the "good times" assumptions, the external subsidy required per pupil is substantially lower and is predicted to be reasonably stable, rising to $203 per elementary and secondary pupil in 1975 and to $215 in 1980[17] (Table 8, columns 3, 6). Even if church revenues should rise only at the "hard times" rate, the required subsidy per pupil would rise only $238 by 1975 and to $320 by 1980 if inflation in lay teacher salaries and other school costs can be held to the "good times" levels described in the previous section.

Moreover, as indicated in Table 9, under a variety of favorable and unfavorable circumstances, there are several states in which external aid would be required under the stated conditions of tolerable burden on church revenues. Even under "hard times" assumptions, in 1980 with partial consolidation of Catholic schools, external subsidies would not be required in eight states, at least at one level of education, elementary or secondary. If, moreover, "perfect consolidation" could be achieved, the number of states requiring no subsidy at one or both levels of education would rise to 13 (Table 9). If counter-inflationary policies should be successful, and if the churches could maintain a three percent annual growth rate in revenues, five more states would require no subsidy by 1980 at one or both levels of education with only partial consolidation of schools (Table 10).

TABLE 8

National Projections of Catholic School Costs and Revenues

"Good Times" Model

		1975			1980		
		Low Cost Full Consolidation (2)	Moderate Cost Partial Consolidation (3)	High Cost Zero Consolidation (4)	Low Cost Full Consolidation (5)	Moderate Cost Partial Consolidation (6)	High Cost Zero Consolidation (7)
Elementary							
Enrollment	3.36 million	—	2.15 million	—	—	1.41 million	—
Ratio of Pupils to Religious Teachers	64.5	—	85.0	—	—	131.9	—
Operating Costs per Pupil	$238	$456	$576	$764	$582	$822	$1,368
Total Operating Deficit	$566.0 million	$781.8 million	$1,039.6 million	$1,442.2 million	$644.2 million	$982.2 million	$1,715.9 million
Secondary							
Enrollment	1.01 million	—	.822 million	—	—	.690 million	—
Ratio of Pupils to Religious teachers	35.4	—	46.8	—	—	72.6	—
Operating Costs per Pupil	$494	$839	$944	$1,073	$1,053	$1,250	$1,531
Total Operating Deficit	$186.4 million	$350.1 million	$436.4 million	$542.2 million	$344.9 million	$481.0 million	$674.6 million
Percentage of Ordinary Church Revenues Required for Elementary and Secondary School Subsidy	59	76	100	134	58	85	141
External and Required per Pupil Elementray and Secondary	--	$87	$203	$374	0	$215	$674

These states tend to be less urbanized middle American states where enrollments in Catholic schools have been relatively low. The states projected to require significantly above average subsidies at both elementary and secondary levels tend to be concentrated in the West and along the East Coast. Interestingly, the states projecting the largest needs for external aid in the coming decade at both levels of education are not those which, like Michigan and Pennsylvania, have often attracted the most national attention for the financial difficulties of their Catholic schools. Indeed, in the state of Michigan, where Catholic schools threaten to close en masse in 1971 for financial reasons, the projected subsidy needs per pupil are only about 1/5 the national averages given above.

Moreover, as indicated in Tables 9 and 10, in many states under either "good times" or "hard times" assumptions, the external subsidies required at the elementary level, particularly in 1980, are either zero or relatively small. This phenomenon may be attributed to the relatively low costs and high pupil-teacher ratios in elementary schools, to relatively less vulnerability to further declines in the proportions of religious teachers and to the relatively more rapid declines in projected enrollments of elementary schools. The economic uniformity that has characterized the Catholic schools of the nation in the past does not thus appear by geography or level of education to

TABLE 9

State-By-State Projections - "Hard Times" Model (Low Revenue, High Costs)

1970 ACTUAL FIGURES

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit
Alabama	178.53	1,167,136	426.43	628,939
Arkansas	179.74	584,141	305.48	132,474
Arizona	186.33	1,831,533	534.67	1,059,126
California	214.50	20,614,560	547.19	14,261,710
Colorado	248.91	4,167,365	485.34	1,126,309
Connecticut	245.11	11,241,295	582.03	4,379,647
District of Columbia	262.42	4,377,462	578.72	2,429,547
Delaware	216.33	2,201,521	378.95	615,880
Florida	229.49	5,834,979	447.31	1,937,809
Georgia	221.79	819,887	581.67	559,620
Hawaii	229.34	667,914	535.83	12,630
Iowa	250.97	10,436,757	453.31	5,007,286
Idaho	167.59	372,937	204.55	101,193
Illinois	268.24	52,221,399	535.30	20,367,728
Indiana	261.19	16,087,642	476.98	3,501,006
Kansas	246.36	5,308,388	480.82	1,989,898
Kentucky	234.59	8,814,516	385.14	1,660,043
Louisiana	196.65	5,007,718	458.96	4,511,044
Maryland	206.78	5,461,596	552.97	2,106,810
Maine	189.39	1,702,002	724.82	669,181
Massachusetts	186.21	15,838,668	377.29	8,211,914
Michigan	303.63	36,073,136	505.80	12,496,553
Minnesota	281.52	20,329,298	581.92	4,562,144
Missouri	242.88	18,051,987	451.61	4,636,797
Mississippi	192.01	865,330	462.22	781,026
Montana	234.18	1,270,878	491.82	925,362
Nebraska	260.03	6,877,798	459.70	3,272,564
North Carolina	173.72	483,261	511.52	187,612
North Dakota	212.00	1,464,709	329.80	456,431
New Hampshire	193.09	2,591,307	337.28	473,573

TABLE 9

State-By-State Projections - "Hard Times" Model (Low Revenue, High Costs) (continued)

1970 ACTUAL FIGURES

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit
New Jersey	224.53	36,330,019	494.67	7,817,225
New Mexico	176.02	933,102	335.80	140,346
Nevada	205.88	226,379	587.66	238,279
New York	260.05	96,571,000	585.33	20,565,776
Ohio	248.07	52,652,802	429.45	12,910,907
Oklahoma	281.09	1,194,272	468.93	234,481
Oregon	250.09	2,859,291	545.26	1,157,319
Pennsylvania	193.36	59,491,108	394.42	25,676,485
Rhode Island	201.81	3,298,682	468.34	1,210,980
South Carolina	175.48	393,129	291.50	166,308
South Dakota	281.12	1,993,627	401.89	565,343
Tennessee	221.75	1,257,582	452.29	838,274
Texas	214.55	7,544,072	538.74	2,189,219
Utah	181.85	223,947	429.96	125,411
Virginia	281.80	3,351,515	663.74	1,931,506
Vermont	229.28	960,538	432.86	540,843
Washington	288.36	5,511,782	504.36	1,498,581
Wisconsin	241.36	26,923,215	504.52	4,454,671
West Virginia	232.06	1,560,979	580.71	1,262,487
United States	237.81	566,044,120	493.72	186,383,910

TABLE 9

State-By-State Projections - "Hard Times" Model (Low Revenue, High Costs) (continued)

1975 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil to Maintain 1970 Rate Elementary and Secondary
Alabama	510.05	4,551,200	1,036.81	1,489,875	300.65
Arkansas	495.92	2,071,178	736.22	839,100	283.58
Arizona	546.31	5,904,301	1,078.56	2,983,769	333.16
California	580.01	66,531,983	1,076.21	39,895,282	312.49
Colorado	660.61	8,642,062	1,067.69	3,071,721	329.55
Connecticut	650.21	24,146,810	1,114.63	11,959,332	320.20
District of Columbia	721.67	11,653,396	1,152.77	7,513,342	362.83
Delaware	611.31	4,458,832	1,113.66	2,876,122	383.59
Florida	546.55	21,471,375	754.85	7,255,650	253.64
Georgia	500.00	2,947,829	1,144.22	1,805,593	259.40
Hawaii	581.45	3,587,244	1,052.69	1,274,859	300.93
Iowa	736.71	13,644,577	999.27	8,228,480	204.48
Idaho	491.79	886,496	413.20	90,392	262.06
Illinois	681.03	107,497,011	1,036.00	49,144,779	300.63
Indiana	694.38	29,262,761	1,091.66	9,205,440	318.04
Kansas	718.51	7,306,200	1,118.84	4,111,100	248.94
Kentucky	738.64	12,434,788	961.72	4,789,569	250.11
Louisiana	559.09	26,076,886	850.85	12,962,160	294.18
Maryland	587.18	14,514,521	1,110.23	7,135,515	319.87
Maine	550.35	2,296,199	1,844.15	981,733	166.21
Massachusetts	560.79	40,491,714	1,034.56	19,762,770	322.99
Michigan	727.16	62,758,124	1,006.02	24,392,721	270.09
Minnesota	879.64	26,119,307	1,164.62	9,525,239	230.46
Missouri	652.49	33,985,738	1,037.53	14,982,770	319.63
Mississippi	537.99	2,616,521	920.30	1,951,356	297.18
Montana	716.37	2,038,389	1,233.57	1,374,514	262.36
Nebraska	710.17	10,942,337	1,118.36	7,754,486	330.96
North Carolina	488.56	2,968,769	1,280.41	514,447	279.89

TABLE 9

State-By-State Projections - "Hard Times" Model (low Revenue, High Costs) (continued)

1975 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil To Maintain 1970 Rate Elementary and Secondary
North Dakota	597.92	2,700,321	887.03	1,056,251	276.46
New Hampshire	556.17	5,211,127	925.36	1,514,378	274.76
New Jersey	632.21	81,250,638	995.59	29,472,757	322.50
New Mexico	596.06	1,960,018	1,168.64	405,306	290.05
Nevada	504.65	815,887	1,122.33	637,587	279.86
New York	666.63	187,121,640	1,234.65	68,887,253	311.71
Ohio	591.64	96,945,768	881.81	38,085,571	275.60
Oklahoma	743.23	2,182,468	1,091.25	751,121	306.28
Oregon	717.77	5,467,824	1,077.61	2,836,561	327.17
Pennsylvania	584.16	116,361,223	825.25	56,906,537	281.79
Rhode Island	612.73	6,788,862	1,023.08	3,621,527	302.79
South Carolina	530.34	2,057,744	824.14	673,108	325.34
South Dakota	727.74	3,082,269	887.09	1,494,840	295.78
Tennessee	702.71	3,300,222	933.03	2,266,681	341.89
Texas	677.79	21,037,416	1,074.69	8,363,478	345.88
Utah	533.41	608,647	978.58	410,008	299.69
Virginia	765.24	6,631,120	1,291.98	4,234,911	337.90
Vermont	724.20	1,361,043	1,044.54	914,428	233.25
Washington	782.90	11,025,964	1,079.94	4,308,937	358.49
Wisconsin	648.66	50,502,952	1,193.95	11,957,978	306.42
West Virginia	664.16	2,168,622	1,401.54	1,712,659	200.67
United States	633.23	1,162,044,300	1,027.84	505,225,900	302.81

TABLE 9

State-By-State Projections - "Hard Times" Model (Low Revenue, High Costs) (continued)

1980 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil to Maintain 1970 Rate Elementary and Secondary
Alabama	748.94	5,739,160	1,542.34	1,497,271	473.34
Arkansas	725.94	2,563,289	1,054.85	1,094,730	453.88
Arizona	831.01	7,241,207	1,490.41	4,078,129	559.54
California	893.27	76,785,162	1,541.82	53,372,163	539.85
Colorado	1,011.31	9,285,882	1,577.55	3,675,678	543.96
Connecticut	1,016.09	26,042,416	1,549.87	15,821,694	537.98
District of Columbia	1,143.72	11,881,270	1,651.97	10,504,265	626.81
Delaware	967.31	4,518,062	1,824.27	4,415,291	728.32
Florida	749.46	28,662,191	889.32	9,358,849	337.31
Georgia	712.62	3,791,348	1,546.99	2,226,588	404.25
Hawaii	841.84	4,959,084	1,453.85	1,800,188	472.19
Iowa	1,142.49	8,853,316	1,472.37	7,621,660	16.78
Idaho	786.98	868,535	839.92	163,303	466.40
Illinois	1,059.99	110,988,124	1,489.81	63,789,338	507.40
Indiana	1,077.98	29,189,076	1,681.14	10,724,196	509.91
Kansas	1,123.73	4,978,248	1,673.20	4,042,269	170.89
Kentucky	1,130.38	7,747,318	1,426.99	4,025,701	65.88
Louisiana	800.52	30,344,841	1,105.22	16,252.676	433.06
Maryland	925.76	15,825,919	1,599.72	9,866,893	556.06
Maine	819.80	1,455,702	2,633.31	637,886	181.16
Massachusetts	914.64	44,931,685	1,679.98	19,323,302	552.09
Michigan	1,127.85	62,419,870	1,454.78	26,215,190	415.34
Minnesota	1,388.66	16,024,912	1,699.46	10,485,042	16.16
Missouri	1,000.83	33,112,272	1,533.92	18,578,470	510.91
Mississippi	819.65	2,709,947	1,235.55	2,522,866	479.79
Montana	1,095.25	1,423,136	1,825.77	910,566	12.73
Nebraska	1,089.20	9,182,325	1,695.81	9,226,481	496.20
North Carolina	724.40	4,044,612	1,884.65	527,434	449.65

TABLE 9

State-By-State Projections - "Hard Times" Model (Low Revenue, High Costs) (continued)

1980 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil to Maintain 1970 Rate Elementary and Secondary
North Dakota	936.83	2,535,063	1,397.04	984,092	394.75
New Hampshire	164.00	5,022,273	1,479.21	1,519,388	431.23
New Jersey	968.54	85,848,591	1,391.24	41,249,328	521.65
New Mexico	910.02	1,334,343	1,722.18	257,653	244.11
Nevada	762.62	1,048,050	1,575.89	834,470	480.75
New York	1,031.53	188,003,450	1,852.23	83,232,088	513.79
Ohio	899.83	108,187,231	1,232.29	51,239,647	464.68
Oklahoma	1,141.56	1,820,663	1,623.14	690,701	388.36
Oregon	1,162.70	5,111,734	1,555.06	3,794,185	544.70
Pennsylvania	924.85	110,362,975	1,203.38	71,936,514	452.18
Rhode Island	1,007.37	5,832,280	1,509.88	4,528,851	493.11
South Carolina	788.89	2,609,296	1,286.83	876,685	536.67
South Dakota	1,106.48	2,675,140	1,276.31	2,054,364	443.48
Tennessee	1,110.93	2,810,514	1,296.70	2,722,689	512.38
Texas	1,068.39	18,889,806	1,506.21	10,465,840	534.24
Utah	828.93	592,299	1,478.99	471,111	497.31
Virginia	1,179.99	5,404,998	1,817.44	5,244,610	509.72
Vermont	1,105.66	803,069	1,569.58	776,658	1.27
Washington	1,226.56	10,949,409	1,609.60	5,656,231	595.98
Wisconsin	1,014.76	51,576,954	1,853.68	12,693,718	488.95
West Virginia	1,011.39	1,522,835	1,993.37	1,159,196	124.10
United States	978.42	1,202,639,700	1,461.49	626,850,710	495.23

TABLE 10

State-By-State Projections - "Good Times" Model (High Revenue, Low Costs)

1970 ACTUAL FIGURES

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit
Alabama	178.53	1,167,136	426.43	628,939
Arkansas	179.74	584,141	305.48	132,474
Arizona	186.33	1,831,533	534.67	1,059,126
California	214.50	20,614,560	547.19	14,261,710
Colorado	248.91	4,167,365	485.34	1,126,309
Connecticut	245.11	11,241,295	582.03	4,379,647
District of Columbia	262.42	4,377,462	578.72	2,429,547
Delaware	216.33	2,201,521	378.95	615,880
Florida	229.49	5,834,979	447.31	1,937,809
Georgia	221.79	819,887	581.67	559,620
Hawaii	229.34	667,914	535.83	12,630
Iowa	250.97	10,436,767	453.31	5,007,286
Idaho	167.59	372,937	204.55	101,193
Illinois	268.24	52,221,399	535.30	20,367,728
Indiana	261.19	16,087,642	476.98	3,501,006
Kansas	246.36	5,308,388	480.82	1,989,898
Kentucky	234.59	8,814,516	385.14	1,660,043
Louisiana	196.65	5,007,718	458.96	4,511,044
Maryland	206.78	5,461,596	552.97	2,106,810
Maine	189.39	1,702,002	724.82	669,181
Massachusetts	186.21	15,838,668	377.29	8,211,914
Michigan	303.63	36,073,136	505.80	12,496,553
Minnesota	281.52	20,329,298	581.92	4,562,144
Missouri	242.88	18,051,987	451.61	4,636,797
Mississippi	192.01	865,330	462.22	781,026
Montana	234.18	1,270,878	491.82	925,362
Nebraska	260.03	6,877,798	459.70	3,272,564
North Carolina	173.72	483,261	511.52	187,612
North Dakota	212.00	1,464,709	329.80	456,431
New Hampshire	193.09	2,591,307	337.28	473,573

TABLE 10

State-By-State Projections - "Good Times" Model (High Revenue, Low Costs) (continued)

1970 ACTUAL FIGURES

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit
New Jersey	224.53	36,330,019	494.67	7,817,225
New Mexico	176.02	933,102	335.80	140,346
Nevada	205.88	226,379	587.66	238,279
New York	260.05	96,571,000	585.33	20,565,776
Ohio	248.07	52,652,802	429.45	12,910,907
Oklahoma	281.09	1,194,272	468.93	234,481
Oregon	250.09	2,859,291	545.26	1,157,319
Pennsylvania	193.36	59,491,108	394.42	25,676,485
Rhode Island	201.81	3,298,682	468.34	1,210,980
South Carolina	175.48	393,129	291.50	166,308
South Dakota	281.12	1,993,627	401.89	565,343
Tennessee	221.75	1,257,582	452.29	838,274
Texas	214.55	7,544,072	538.74	2,189,219
Utah	181.85	223,947	429.96	125,411
Virginia	281.80	3,351,515	663.74	1,931,506
Vermont	229.28	960,538	432.86	540,843
Washington	288.36	5,511,782	504.36	1,498,581
Wisconsin	241.36	26,923,215	504.52	4,454,671
West Virginia	232.06	1,560,979	580.71	1,262,487
United States	237.81	566,044,120	493.72	186,383,910

TABLE 10

State-By-State Projections - "Good Times" Model (High Revenue, Low Costs) (continued)

1975 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil To Maintain 1970 Rate Elementary & Secondary
Alabama	$467.73	$ 4,043,302	$ 950.85	$ 1,317,949	$234.22
Arkansas	455.87	1,846,937	682.46	727,017	226.83
Arizona	496.48	5,237,140	979.67	2,545,679	248.56
California	525.73	57,847,384	983.92	33,735,840	225.60
Colorado	603.03	7,801,392	984.37	2,691,755	227.37
Connecticut	591.44	21,590,468	1,022.06	10,154,219	216.44
District of Columbia	651.36	10,120,603	1,042.01	6,196,379	250.10
Delaware	555.94	4,010,283	1,021.46		283.30
Florida	495.48	18,493,944	692.34	5,774,207	186.07
Georgia	456.95	2,525,936	1,051.01	1,516,649	189.41
Hawaii	527.58	3,043,185	951.91	896,925	227.52
Iowa	675.26	12,446,322	918.72	7,388,371	64.51
Illinois	616.72	94,995,320	949.42	42,187,321	193.01
Indiana	629.98	26,358,312	989.75	7,877,546	198.30
Kansas	666.30	6,737,053	1,034.65	3,685,131	122.90
Kentucky	677.18	11,322,220	894.53	4,248,691	131.09
Louisiana	509.22	22,571,073	781.21	10,914,720	225.19
Maryland	532.81	12,823,723	1,008.16	5,864,783	227.66
Maine	512.01	2,123,684	1,717.04	896,569	52.50
Massachusetts	514.38	36,542,017	946.12	17,507,590	236.60
Michigan	658.19	55,764,195	919.99	21,136,521	147.90
Minnesota	800.73	23,665,082	1,072.53	8,291,267	69.67
Missouri	595.12	30,681,099	955.66	13,083,260	216.11
Mississippi	495.25	2,334,420	848.69	1,727,954	221.58
Montana	652.10	1,839,153	1,140.45	1,246,942	120.82
Nebraska	647.78	9,919,129	1,025.19	6,933,634	201.73
North Carolina	446.99	2,577,992	1,172.08	449,447	224.97
North Dakota	552.44	2,477,480	618.39	946,430	184.12
New Hampshire	513.29	4,752,290	860.68	1,359,136	195.30

TABLE 10

State-By-State Projections - "Good Times" Model (High Revenue, Low Costs) (continued)

1975 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil To Maintain 1970 Rate Elementary & Secondary
New Jersey	$573.13	$72,654,083	$ 902.33	$24,044,906	$223.47
New Mexico	550.68	1,783,048	1,081.20	363,338	205.93
Nevada	460.03	704,340	1,026.79	542,043	202.20
New York	604.13	166,493,990	1,132.22	57,825,062	202.11
Ohio	537.53	87,422,173	808.63	32,868,222	179.07
Oklahoma	684.17	1,969,851	1,004.43	645,206	198.91
Oregon	654.33	4,915,905	992.94	2,484,323	213.37
Pennsylvania	532.56	105,396,436	760.46	50,809,425	187.45
Rhode Island	561.16	6,103,034	943.80	3,154,588	209.99
South Carolina	486.31	1,815,541	756.94	596,504	265.59
South Dakota	667.80	2,818,543	818.39	1,340,273	179.29
Tennessee	642.25	2,937,445	857.49	1,962,267	246.27
Texas	619.78	18,734,551	991.89	6,988,993	256.48
Utah	488.99	542,011	895.69	351,153	220.89
Virginia	697.69	5,874,576	1,185.13	3,699,627	212.82
Vermont	674.21	1,256,062	972.31	835,700	110.11
Washington	711.57	9,863,585	989.96	3,721,408	239.07
Wisconsin	590.08	45,605,794	1,094.22	10,383,312	197.34
West Virginia	610.52	1,980,895	1,291.90	1,549,293	51.51
Idaho	454.08	803,537	391.00	80,256	213.02
U.S. Total	576.25	1,039,573,130	944.11	436,398,660	203.17

TABLE 10

State-By-State Projections - "Good Times" Model (High Revenue, Low Costs) (continued)

1980 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil To Maintain 1970 Rate Elementary & Secondary
Alabama	$ 634.36	$ 4,593,416	$1,306.41	$ 1,190,561	$ 298.25
Arkansas	618.86	2,070,750	910.04	834,087	303.40
Arizona	693.57	5,798,007	1,258.95	3,082,836	337.57
California	744.91	59,872,928	1,292.78	38,629,106	298.10
Colorado	852.29	7,679,765	1,338.38	2,838,587	250.30
Connecticut	851.92	21,232,156	1,311.20	11,525,667	248.72
District of Columbia	946.14	9,253,414	1,378.11	7,491,804	312.64
Delaware	809.36	3,715,085	1,514.53	3,455,094	412.66
Florida	629.12	21,910,731	746.47	4,730,596	183.00
Georgia	605.18	2,878,137	1,339.14	1,644,613	236.18
Hawaii	704.76	3,697,971	1,220.56	960,347	292.48
Iowa	974.22	7,490,299	1,263.51	6,284,969	-481.39
Illinois	882.73	88,848,563	1,253.61	47,444,380	199.59
Indiana	900.36	24,091,305	1,400.83	8,145,341	155.97
Kansas	958.02	4,199,426	1,444.50	3,310,443	-290.93
Kentucky	515.83	3,261,052	1,242.54	3,232,566	-371.10
Louisiana	677.21	23,525,960	954.37	11,847,875	267.24
Maryland	771.54	12,633,620	1,345.97	7,024,868	297.41
Maine	722.19	1,270,245	2,342.22	550,558	-620.84
Massachusetts	770.12	36,823,995	1,416.28	15,499,73[illegible]	283.31
Michigan	939.08	50,433,072	1,230.26	20,152,995	58.70
Minnesota	1,167.56	13,371,775	1,448.59	8,076,769	-555.71
Missouri	845.70	27,512,020	1,306.91	14,401,607	209.58
Mississippi	701.78	2,203,107	1,067.07	2,017,444	275.07
Montana	922.74	1,181,622	1,589.92	769,056	-500.44
Nebraska	923.00	7,703,089	1,440,58	7,516,436	101.18
North Carolina	609.20	3,099,965	1,593.42	410,939	303.41

TABLE 10

State-By-State Projections - "Good Times" Model (High Revenue, Low Costs) (continued)

1980 PROJECTIONS

State	Total Per Pupil Costs Elementary	Elementary Deficit	Total Per Pupil Costs Secondary	Secondary Deficit	Required Subsidy Per Pupil To Maintain 1970 Rate Elementary & Secondary
North Dakota	$ 805.11	$ 2,153,065	$1,194.03	$ 801,375	$ 98.05
New Hampshire	761.67	4,215,507	1,275.29	1,233,903	172.79
New Jersey	809.50	70,152,046	1,165.39	28,601,835	254.84
New Mexico	787.64	1,126,305	1,495.32	212,280	-54.75
Nevada	644.27	811,344	1,345.68	627,282	280.75
New York	861.93	152,505,850	1,560.38	60,176,138	191.68
Ohio	752.23	89,294,214	1,040,45	38,424,304	203.32
Oklahoma	981.01	1,515,621	1,397.73	532,912	49.39
Oregon	975.05	4,192,265	1,337.26	2,988,325	207.28
Pennsylvania	778.41	91,911,280	1,024.17	57,743,502	171.53
Rhode Island	849.82	4,776.645	1,293.11	3,510,044	195.27
South Carolina	666.59	2,058,954	1,083.84	693,997	370.58
South Dakota	949.19	2,281,916	1,083.81	1,650,113	107.17
Tennessee	936.89	2,271,001	1,109.10	2,084,837	236.80
Texas	903.01	15,300,889	1,305.94	7,642,057	275.48
Utah	705.21	480,947	1,261.11	362,168	266.86
Virginia	999.80	4,377,885	1,555.76	4,119,394	139.74
Vermont	969.95	694,503	1,374.44	659,573	-474.03
Washington	1,028.02	8,944,118	1,360.69	4,312,161	247.42
Wisconsin	849.08	42,630,033	1,567.05	9,827,330	160.75
West Virginia	868.35	1,293,977	1,704.34	982,080	-660.19
Idaho	673.49	720,997	686.77	117,357	295.72
U. S. - Total	821.76	982,163,300	1,250.07	480,972,630	215.48

characterize their needs for aid in the future, despite commonly shared cost pressures. Thus, economic survival alone would not be sufficient reason for uniform national policies of cutbacks and closings of total school systems by church administrators.

However, even if aid should be forthcoming in the requisite amounts to stablize the economic burden on the churches, it is not clear that the implications of the resulting contracted school systems would be suitable to maintenance of full-time Catholic schools. As indicated earlier, Catholic school systems were established as quasi-public systems of mass education for Catholic children. Apart from questions of the contemporary relevance of this goal, the fact is that Catholic schools in recent decades have served a steadily declining share of the Catholic school age population at a steadily increasing cost per pupil. From a peak enrollment share of just under 54 percent of the nation's Catholic school age population in 1958, Catholic schools have enrolled a steadily smaller share of school age Catholics. Despite declining rates of baptisms and births, Catholic schools in 1970 enrolled only about 31 percent of the Catholic school age population and that share is projected to 22 percent by 1975 and probably below 20 percent by 1980.

At the same time, annual operating costs per pupil, even with partial school consolidation, by 1975 will be 265 percent of 1970 levels in the elementary schools and 210 percent of 1970 levels in the secondary schools. By 1980 the same educational costs may have risen to 410 percent and 300 percent of 1970 levels respectively. It is not clear that economic feasibility alone will be deemed sufficient justification for the commitment of approximately 60 percent of future church revenues for all purposes in order to subsidize the education of the one out of five Catholic school age children still willing to patronize the full-time Catholic school system.

VII. CONCLUSION

In light of projected needs for external aid under any reasonable set of assumptions, the financial burden of subsidy on the public sector is not out of the range of feasibility, especially when compared to costs of absorption of parochial school children into public schools if nonpublic school decision makers should conclude that there is ultimately no future for their forms of alternative education. Even under the assumptions of the "hard times" model, the aid requirements of Catholic elementary and secondary schools with partial consolidation of schools in response to declining enrollments are projected at less than 700 million dollars nationally in 1975.

This total compares favorably with projected increases in operating costs alone to public schools for immediate absorption of the total nonpublic enrollment, estimated in another component of this study at 1.3 billion dollars, assuming maximum crowding of public schools, in addition to the need for additional facilities with current construction costs of over 4.5 billion dollars. Assuming a lower and presumably more feasible level of crowding, projected operating costs to the public sector of absorption rise to about 3 billion dollars with a need for additional facilities worth perhaps over 10 billion dollars.[18]

The possibility of direct aid in any form to nonpublic schools has been greatly reduced by the July, 1971 decision of the Superme Court. Attention has understandably shifted to feasible forms of aid to pupils and their families. The operational feasibility of an income tax credit or deduction for user charges, e.g., tuition and fees, is understandably appealing. The tax credit would make nonpublic school enrollment costless to users, while the tax deduction would reduce costs to the users according to marginal income tax rates applicable to school users.

Since user charges in Catholic schools currently account for only about 25 percent of elementary school costs and 60 percent of secondary school operating costs, the full value of either the tax credit or deduction would not be realized by the schools unless tuition rates were raised to 100 percent of school operating costs. Otherwise, at present tuition rates, the independent non-affiliated schools and the schools of certain religious sects with traditionally high tuition charges, e.g., Episcopal schools, would benefit disproportionately from this form of aid.

Assuming that user charges could feasibly be raised, it is clear that the tax credit would be a more equitable form of aid to parents than the tax deduction. Otherwise, those in the highest income brackets would receive the largest subsidy per child. Such an effect would not aid efforts at greater integration of minorities into nonpublic schools.

On the other hand, assuming that user charges would be raised to 100 percent of operating costs to maximize eligibility for aid, the tax credit would impose costs on the public sector greater than necessary to induce Catholics to maintain their schools. In effect, the taxpayer would be bearing the full cost of educating pupils in nonpublic schools. While this might still represent some saving over the cost to the public sector of absorption into public schools, the projected cost of aiding Catholic school pupils in 1975 would rise to 2.2 billion, rather than 700 million dollars under the assumptions of partial support from the private sector. Finally, as indicated elsewhere in this study, it is not clear that present levels of tuition are a significant determinant of rapidly declining enrollments in Catholic schools. If, in fact, cultural, social and other non-economic factors are the overriding determinants of enrollment declines, it is not clear that aid to parents will substantially relieve the long run prospects for the future of the largest segment of nonpublic education. It would thus appear that the efficiency and equity of any proposal for aid deserve further analysis prior to public commitment.

Earlier, it was stated that nonpublic education bears some of the economic characteristics of both a public service and a private good, and the implications for the future of that uneasy union have been examined in the body of this report. Ultimately, however, the survival of the Catholic schools will depend at least as much on the stimulation of private interest and determination in both the use and the support of the Catholic schools as upon the successful appeal of the schools for public aid. Without the latter, the former may be difficult, in some cases impossible; without private interest and involvement, however, not all the public aid conceivable will succeed in putting Saint Humpty Dumpty back together again.

FOOTNOTES

1. Provision and maintenance of convent housing by the school has historically also been a part of the total compensation of religious teachers.

2. E. Bartell, C.S.C.: Costs and Benefits of Catholic Elementary and Secondary Schools (University of Notre Dame Press, 1968), page 43.

3. Source: NCEA Data Bank Report 1970-71, which is the source of all financial data on Catholic schools in this section unless otherwise indicated.

4. Source: NCEA Data Bank Report 1970-71.

5. Ibid.

6. See, for example, E. Bartell, op. cit., St. Louis Catholic Schools: The Allocation and Distribution of Human and Financial Resources (1970), hereafter cited as St. Louis, op. cit. The Archdiocese of Denver: A Report on Catholic Elementary and Secondary Schools (1969), hereafter cited as Denver, op. cit. (all published by the Office for Educational Research, University of Notre Dame).

7. E. Bartell, op. cit., page 148.

8. Parish subsidy rates are confirmed in state-by-state measurement, as aggregated in Table 7, and reported individually in Table 9, and in supplementary volumes of this report.

9. Attitudes of various segments of Catholic Church membership are described and analyzed in another component of the present study.

10. It may be argued that the correlation results from the fact that the sources of family income data are estimates by the same diocesan school superintendents responsible for school financial data. However, individual diocesan case studies in Denver and St. Louis with independent sources of family income data tend to corroborate the correlation of school financial items with family income.

11. E. Bartell, op. cit., St. Louis, op. cit.

12. Because separate national cost data for elementary and secondary schools were not available, separate cost data for Catholic elementary and secondary schools were weighted by relative by public school enrollment at both levels for purposes of comparison.

13. On the basis of national data the differential between average actual salaries of Catholic school lay teachers and public school teachers is greater than the nominal difference assumed here in salary schedules, because of lower average academic qualifications and years teaching experience among Catholic school lay teachers. Based upon salary data in The 1970 Digest of Education Statistics and the NCEA Data Bank Report for 1970 with standardization for relative differences in elementary and secondary school enrollments, average Catholic school lay teachers' salaries in 1969-70 equalled about 69 percent of those of their public school counterparts. If allowance were made for this affitional differential, the value of contributed services of religious teachers would be correspondingly higher.

14. Alaska and Wyoming are excluded because of the relatively small size of their statewide Catholic school systems. Alaska reported a total of 732 elementary and secondary pupils in 1970, while Wyoming reported 2,043 elementary and no secondary pupils in 1970.

15. The NCEA ratio of school operating costs to total parish church operating revenues of .529 was considered sufficiently reliable and uniform to be used for an extrapolation of parish operating revenues from school cost data in the absence of specific parish revenue data.

16. A crude estimate on the basis of existing data at Notre Dame suggests that income elasticity of demand for present forms of Catholic schooling may be as low as .7.

17. Indeed, if perfect consolidation could be achieved by 1980, the net average public subsidy for the entire nation would fall to zero, although this would presume national redistribution of available parish surpluses.

18. The assumptions behind these estimates are explained in the accompanying report on costs of absorption to the public sector. It should be noted that the cost estimates in that report refer to

immediate costs of absorption of all nonpublic school children, not just Catholic school pupils. However, even if a deduction is made for the 20 percent of nonpublic school children enrolled in non-Catholic nonpublic schools, the qualitative results of the comparison are unchanged. Moreover, costs of once-and-for-all absorption could probably be expected to increase if projected to 1975 for more accurate comparison. The most accurate comparison, however, would require a schedule of projected nonpublic school closings rather than the assumption of simultaneous closing of all nonpublic schools.

IV. THE NON-CATHOLIC PRIVATE SCHOOL

Arthur J. Corazzini

THE NON-CATHOLIC PRIVATE SCHOOL

Often discussions concerning the financing of private elementary and secondary schools concern themselves solely with the Catholic school system. There are, of course, a variety of other religious and non-religious affiliated private elementary and secondary schools which would benefit from any aid to private school legislation. The schools do not enroll relatively large numbers, if we look at nationwide totals. However, in particular regions of the country and to certain constituencies they are quite important.

There are a series of important policy questions which should be answered regarding the private, non-Catholic schools. The most obvious of these asks simply: Is the financial crisis presently being faced by Catholic schools paralleled in the private non-Catholic sector? Of further particular interest to policy makers are the precise reasons why the answer to that question is yes or no. In order to answer broad-based questions concerning private non-Catholic schools we would have to have detailed data on enrollment, cost trends, sources of income, and changes in expenditure patterns. For the Catholic schools, our chief source of national information is the research department of the National Catholic Educational Association. Unfortunately, no parallel organization exists for private non-Catholic schools. Consequently, it has been extremely difficult to gather necessary data--if indeed it exists--on all private non-Catholic elementary and secondary schools.

We have relied on data from a variety of sources, none of them completely satisfactory in themselves, in order to gain some straightforward answers to simple questions concerning national enrollment trends and total expenditures of such schools. Our enrollment model estimates the total private non-Catholic school population to be 914,793 in the current year. That population is expected to decline, but not nearly as precipitously as the Catholic school population. In 1975 it is projected that 845,300 students will be enrolled in these schools, a decline of 7.6 percent. By 1980 the anticipated decline will result in a projected population of 763,900 students in these schools, for an overall decline of 16.5 percent in ten years.

In order to estimate the present private sector commitment to education, we relied on the unpublished data from Otto Kraushaar's 1969 Harvard Graduate School of Education study, A Study of the American Independent School. These survey data suffer from small sample size resulting in non-reporting for some cell cross-classifications. They are, however, our only available nationwide sample. The data contain a percentage distribution of non-public school enrollments and expenditures per pupil for 1968-69. The distribution is broken into three geographical classifications which conform to the standard rural, suburban and urban categories and further list financial information for eight different private school groupings. By combining these enrollment weights and expenditure estimates with available actual enrollments for 1969-70 obtained from the Board of Parish Education, the Lutheran Church, Missouri Synod, we were able to compute an approximate total annual current expenditure figure for the nation's non-Catholic private schools. We emphasize the approximate nature of this figure, given the necessity of combining available data sources. It is hoped that the calculations will be of some use to the Commission. We estimate total private non-Catholic school expenditures in 1970-71 to be $609,193,251. This can be broken down into $256,870,731 for elementary schools, and $352,322,520 for secondary schools (see Table 1). In this breakout, the assumption is made that the percentage distribution of students between rural, suburban, and urban areas by denomination is the same for elementary and secondary school levels. Turning now to the Kraushaar study, some comparisons between Catholic and non-Catholic private schools can be drawn regarding enrollment distribution and types of expenditures and sources of finance.

The percentage distributions of enrollments, as has been stated, are broken down into farm and small city, suburb, and central city classifications. In what follows we compare the distribution of the Catholic school children population with that of the Lutheran, Adventist, Jewish, Episcopal, Christian Reformed, and Non-Religious Affiliated school populations.

In 1963, the Catholic population was distributed such that 33.3 percent attended school in the central city, 58 percent in suburban areas, and 27.7 percent in farm or small city areas. In contrast, the Lutherans were more heavily concentrated in the central city (45 percent) and the Jewish schools were virtually all in the downtown areas. The Episcopal schools, on the other hand, were concentrated in farm and small city areas. The other private school populations were distributed similar to the Catholic distribution. There was little, if any, change in these percentage distributions over the period 1963-68 (see Table 2).

Average expenditures per student gives a crude measure of the amount of resources allocated by the various groups to their schools. We must emphasize the term crude, however, insofar as the contributed services of religious facutly may vary from denomination to denomination in a non-systematic way. In this event, the average expenditure figures do not yield an accurate index of relative resource costs. If we make the simplifying assumption that all denominational affiliated teachers make identical contributions of services (in dollar terms), then we can use the expenditures to rank resource costs for the different private schools. In 1968 the average expenditure figures for elementary schools reveal that in the farm and small city category, Episcopal-controlled units spent more than any of the other private schools. At $1,267 per pupil, their money costs were eight times the Catholic costs of $152 per pupil and more than half again as much as non-religious private school expenditures of $750 per pupil. However, when we look at the suburban and central city categories, some things change. Specifically, in both suburban and central city categories, the private non-religious schools were by far the most expensive to run, in terms of money costs per pupil. The Catholic schools remained the lowest. At the secondary level, the non-religious affiliated schools again spent the most per pupil, but the Episcopal rural schools again exhibited high expenditures and the Catholics low expenditures. Only the Adventist rural schools had lower per pupil costs than the comparable Catholic schools (see Table 3).

It is interesting to note that in 1968-69 the Catholic schools ranked third in this eight-way breakout of expenditures, in the level of median salaries plus fringe benefits paid lay teachers. According to this survey, the median salary paid lay teachers in Catholic schools was $6,933 per annum, third behind the $8,797 paid by the non-religious private and $7,842 paid by the Episcopal Church. The range of median salaries was from the high of $8,797 to a low of $5,512 attributable to the broad category of "other religious schools." Given the relatively high median salary paid Catholic lay teachers and the low level of overall expenditures per pupil, Catholic schools must necessarily tolerate higher pupil/teacher ratios or much higher religious-teacher-to-pupil ratios or both (see Table 4).

Looking now at changes in average annual operating income over the period 1963-1969, we see that such income increased by 47.4 percent for Catholic schools located in small cities, 103.9 percent for such schools located in the suburbs but decreased 65.7 percent for these schools located in the central city. This type of decrease in income for the central city schools was not experienced by any other sectarian school. Indeed, all achieved sizable increases in average annual income for almost all categories of school districts. The exceptions to this general rise in revenues were the Christian Reformed and Adventist suburban schools. These two types of schools did experience declines in income in their suburban schools (see Table 5).

By breaking the sources of income it is possible to get some insight into the relative changes in the differing sources. For example, average fee and tuition income exhibits somewhat different behavior in terms of percentage chgnges than does aggregate income. In the farm and small city category, the Lutherans experienced a decline in such income, although overall they experienced an increase of 6.79 percent in income for schools so classified. In the suburban category the decline in Adventists average income was mirrored in the percentage decline in tuition and fee income. In the central city category, the Catholic sources of tuition and fee income apparently declined at approximately the same rate as overall average income over the period 1963-1968 (see Table 6).

Average contributions do not provide a similar explanation for the decline in Catholic central city school income. Indeed, in that particular category, central city schools experienced a marked increase in funds. Only the Adventist suburban schools seemed to follow a consistent pattern with a registered decline in income from this source. Interestingly, both the Episcopal and catch-all "other religious school" units appeared to suffer declines in income from contributions (see Table 7).

A look at average donations (independent and corporate) is revealing insofar as there is evidence that the number and size of such donations to Jewish schools in central cities has increased considerably over the 1963-1968 period. The same is true for Adventist schools so located, and in general the non-Catholic private schools in the central city seem to be doing quite well in this category of income. The Lutheran and central city Catholic schools are the exceptions in this regard, however, in not having experienced the marked increase in such contributions characteristic of the other private schools (see Table 8).

The rather sketchy evidence on endowments yields only a small bit of information. It indicates that the non-religious private school has experienced a considerable percentage increase in endowment income over the 1963-1968 period, a not very surprising result. Somewhat more surprising is the reversal in fate for the Episcopal and Catholic schools. While the Episcopal central city schools have experienced large increases in income from these sources, the Catholic central city schools have experienced a marked decline in such income (see Table 9).

TABLE 1. Estimated Expenditures of Selected Private Elementary and Secondary School Groupings, 1968-1969, Excluding Catholic Schools.

	Elementary	Secondary
Lutheran	$54,279,614	$11,088,186
Seventh Day Adventist	17,679,044	2,925,960
Jewish	46,161,392	19,380,000
Episcopal	32,958,302	29,651,084
Other Religious	51,260,729	17,455,330
Non-Religious Affiliated	44,557,047	258,140,848
Total	246,896,128	338,641,408
Estimated Total		
1969-70	251,834,050	345,414,236
1970-71	256,870,731	352,322,520

TABLE 2. Percent Total Enrollments in Schools of Three Geographic Classifications.

	1963			1968		
	Farm and Small City	Suburb	Central	Farm and Small City	Suburb	Central
Roman Catholic	27.70	38.98	33.32	26.93	38.14	34.94
Lutheran	27.85	26.37	45.79	31.86	27.83	40.30
Seventh Day Adventist	21.28	38.72	40.00	24.50	33.21	42.29
Jewish	0.0	10.03	89.97	0.0	23.95	76.05
Episcopal	53.99	32.71	13.31	46.67	39.60	13.72
Christian Reformed	23.70	40.25	36.05	33.97	36.19	29.85
Other Religious	38.29	34.64	27.07	31.44	41.20	27.36
Non-Religious Affiliated	23.35	40.53	36.13	24.83	41.62	33.55

TABLE 3. Average "Average Dollar Expenditure" per Student by Geographical Characteristic 1968-69.

	Elementary			Secondary		
	Farm and Small City	Suburb	Central	Farm and Small City	Suburb	Central
Roman Catholic	150	154	154	356	381	306
Lutheran	269	283	300	1,000	550	600
Seventh Day Adventist	345	300	375	250	550	475
Jewish	000	750	814	000	000	1,275
Episcopal	1,267	743	620	1,696	1,800	000
Christian Reformed	322	433	400	600	500	500
Other Religious	425	489	600	675	700	700
Non-Religious Affiliated	750	1,341	1,057	1,779	1,454	1,457

TABLE 4. Median Salaries plus Benefits Paid Lay Teachers, 1968-69.

Roman Catholic	$6,933
Lutheran	6,795
Seventh Day Adventist	5,936
Jewish	5,967
Episcopal	7,842
Christian Reformed	6,381
Other Religious	5,512
Non-Religious Affiliated	8,797

TABLE 5. Percent Change = $\frac{(\text{Income } 1968 - \text{Income } 1963)}{\text{Income } 1963} \times 100^*$

	Farm and Small City	Suburb	Central
Roman Catholic	47.41	103.90	-65.73
Lutheran	6.79	38.67	42.00
Seventh Day Adventist	54.32	-49.99	0.04
Jewish	N/A	6.82	86.06
Episcopal	45.61	328.23	110.69
Christian Reformed	57.56	-62.23	N/A
Other Religious	38.21	-4.91	28.54
Non-Religious Affiliated	5.49	41.69	16.36

---

[*] Negative percents indicate that the 1963 entry was larger than the 1968 entry. N/A indicates no sample schools reporting in 1963.

TABLE 6. Percent Change = $\frac{\text{(Fees 1969 - Fees 1963)}}{\text{Fees 1963}} \text{ X } 100^{*}$

	Farm and Small City	Suburb	Central
Roman Catholic	52.05	64.39	-68.55
Lutheran	-25.06	35.53	44.47
Seventh Day Adventist	2.94	-53.96	-34.33
Jewish	N/A	-5.56	56.26
Episcopal	35.26	387.56	103.99
Christian Reformed	47.53	10.28	N/A
Other Religious	12.93	-17.71	424.39
Non-Religious Affiliated	-0.28	43.97	13.31

[*] Negative percents indicate that the 1963 entry was larger than the 1968 entry. N/A indicates no sample schools reporting in 1963.

TABLE 7. Percent Change = $\frac{\text{(Contributions 1968 - Contributions 1963)}}{\text{Contributions 1963}} \text{ X } 100$[*]

	Farm and Small City	Suburb	Central
Roman Catholic	36.94	281.42	89.28
Lutheran	9.36	54.04	54.42
Seventh Day Adventist	25.25	-35.32	9.14
Jewish	N/A	N/A	N/A
Episcopal	6.28	-80.50	8.33
Christian Reformed	-6.32	47.39	N/A
Other Religious	84.88	-38.89	505.36
Non-Religious Affiliated	85.55	N/A	-45.16

---

[*] Negative percents indicate that the 1963 entry was larger than the 1968 entry. N/A indicates either no respondents for 1963 or no contributions.

TABLE 8. Percent Change = $\frac{(\text{Donations 1968} - \text{Donations 1963})}{\text{Donations 1963}} \times 100$*

	Farm and Small City	Suburb	Central
Roman Catholic	27.01	-36.55	7.43
Lutheran	25.00	957.50	-20.94
Seventh Day Adventist	1,310.00	N/A	166.79
Jewish	N/A	35.00	108.85
Episcopal	31.40	N/A	80.00
Christian Reformed	2,226.80	11.53	N/A
Other Religious	84.73	157.67	83.43
Non-Religious Affiliated	72.65	-38.82	90.96

*Negative percents indicate that the 1963 entry was larger than the 1968 entry. N/A indicates no respondents for 1963 or total equal to zero for the cell in 1963.

TABLE 9. Percent Change $\frac{\text{(Endowment 1968 - Endowment 1963)}}{\text{Endowment 1963}} \times 100$[*]

	Farm and Small City	Suburb	Central
Roman Catholic	7,670.51	679.35	-70.59
Lutheran	-36.11	N/A	N/A
Seventh Day Adventist	N/A	N/A	N/A
Jewish	N/A	N/A	N/A
Episcopal	76.93	N/A	260.00
Christian Reformed	N/A	-100.00	N/A
Other Religious	56.29	-16.91	N/A
Non-Religious Affiliated	-0.17	181.60	410.61

---

[*] Negative percents indicate that the 1963 entry was larger than the 1968 entry. N/A indicates no respondents for 1963 or total equal to zero for the cell in 1963.

V. THE ESTIMATED MARGINAL COSTS OF ABSORBING ALL NONPUBLIC STUDENTS INTO THE PUBLIC SCHOOL SYSTEM

Thomas R. Swartz

CONTENTS

I. Introduction. 303
II. The Results of the State-By-State Analysis . . . 311
III. The Results of the State-Subdivisions Analysis . . 331
IV. Conclusion 346
Appendix C 576

I. INTRODUCTION

The appearance of numerous non-public school closings - particularly Catholic schools - since 1965 has prompted many authors to estimate the cost of absorbing the remaining non-public students into the public school system. These estimates have taken many forms. Some assume that the per pupil costs in the public sector will not change as the new students are added to the system. Others have examined the costs currently borne by the private sector, and assume that with some adjustments these costs will revert totally to the public sector in the event of massive non-public school closings. Still others have contended that non-public school students can be absorbed with little or no additional costs, apparently assuming that there is sufficient excess capacity available for non-public school students.

This study attempts to estimate the marginal or extra costs of absorbing the non-public school students. Three basic steps are needed to arrive at this estimate. First, the current excess capacity in the public school system must be determined. Second, the net number of students that will enter the public school system must be determined. Third, the appropriate per pupil costs must be applied to each of these new registrants.

This analysis was conducted on two levels: State-by-State and Subdivisions of each State--Central City Standard Metropolitan Statistical Area (SMSA), Other Standard Metropolitan Statistical Area, and Outside Standard Metropolitan Statistical Area.

The state-by-state analysis provides a gross estimate of the marginal costs of absorbing nonpublic students. Unfortunately, this analysis is predicated upon the assumption that nonpublic students will first fill any available seats in the public school system. This assumption would not cause undue distortions in the estimate of costs if excess public school capacity and nonpublic school enrollments were evenly distributed across a state. This is not the case, however. There is substantial variation in excess capacity in the urban rural and suburban areas. If the state-by-state cost estimates were to be accepted, state-wide or at least regional busing would be necessary.

Although the state-by-state analysis in most cases distorts the true marginal costs of absorbing nonpublic students, it does provide an index of the relative costs between states. As would be expected, the costs are substantially less in the southern and in the less densely populated states than they are in the northeastern and the more densely populated states. The state-by-state analysis also reveals that the largest cost will be realized in absorbing elementary nonpublic students compared to secondary nonpublic students. This result obtains even though public school enrollments are falling faster at the elementary level and per pupil costs are lower at this level than they are at the secondary level. In addition to the larger number of school-age children at the elementary level, two other factors tend to increase the costs for elementary education compared to secondary education. First there are proportionately fewer nonpublic students at the secondary level. Many students that attend nonpublic elementary schools choose to attend public secondary schools. Thus far fewer students must be absorbed at the secondary level. Second, more effort has been extended in the reduction of pupil/teacher ratios at the secondary level than has been extended at the elementary level. Under the high and the low excess capacity formulae the rapidly declining pupil/teacher ratios at the secondary level generates more potential capacity than the slowly declining or static pupil/teacher ratios of the elementary level.

The gross estimates of marginal costs generated in the state-by-state analysis are refined by dividing each state into three regions; Central Cities SMSA, Other SMSA, and Outside SMSA. These regions are an approximation of urban, suburban and rural categories.

Joseph Froomkin calculated the percentage of school-age children by these three regions. This estimates are made on a three year average - 1967-1969 - and collected on a regional basis - Northeast, North Central, South and West. The distortions caused by grouping the fifty states and the District of Columbia into four regions proved unsatisfactory for the calculation of marginal cost estimates by regions within individual states[1]. As a consequence, an estimation of the percentage of school-age children in the three regions - Central City SMSA, Other SMSA, and Outside SMSA - was calculated at the University of Notre Dame. This estimation is based on the Census of Population, 1970, Advanced Reports; PC (V2) Series, General Population Characteristics.[2]

The percentage of school-age children in the three regions was then applied to the actual number of children enrolled in public schools in each state during the academic year 1969-70. This procedure generates an estimate of the number of children in each state attending public schools in Central Cities SMSA, Other SMSA, and in public schools Outside of SMSA classifications. Two minor distortions are involved with this technique. First, it must be assumed that the distribution of school-age children in each state was the same in the fall of 1969 as it was in the spring of 1970. However, there is little reason to expect massive shifts in population which might alter this estimation. Second, the retention rates might vary between central cities and the remaining two regions. Since the percentage distribution is applied to the total enrollment in public schools in each state, there might be a slight over estimation of the number of children attending central city schools and a slight under estimation of the number of children attending public schools in Other SMSA classifications.

A second complication in estimating the marginal costs on a state-regional basis, is the determination of the appropriate pupil/teacher ratios in the three regions within each state. The estimation of these ratios is based upon the NCES sampling of school districts found in Statistics of Local Public School Systems, 1967 and 1968 and prepublication data for 1969.[3] A weighted average pupil/teacher ratio for elementary and secondary schools was calculated for the three regions in each state. The variation in these ratios from 1967 to 1969 were so wide that the estimations were discarded.[4] Since confidence could not be placed in the pupil/teacher ratios by elementary and secondary levels, ratios were calculated for K-12. These weighted average pupil/teacher ratios for the three regions within each state proved to be internally consistent.

Thus, the regional analysis state-by-state could not be conducted separately for elementary and secondary schools. Some detail is lost by examining the marginal costs of absorbing nonpublic students on a K-12 basis, since the potential capacity varies from elementary to secondary level. However, this loss is compensated for by the more logically acceptable state-subdivision analysis. The principal advantage of this approach is its ability to lump like areas together. Thus, the concentration of nonpublic students in central cities, even though there exists a relatively large potential excess capacity in central cities, results in much higher costs of absorbing nonpublic students in these areas. Conversely, the relatively few nonpublic students in areas outside of SMSA regions generate a relatively small marginal cost.

In each phase of the analysis, the state-by-state, the state-subdivision, and the city-by-city, high and low costs were estimated. The smallest costs to the public sector are calculated under the "High Excess Capacity" formula. This formula assumes that pupil/teacher ratios will rise to the highest level experienced during the past six years. Since pupil/teacher ratios have generally fallen during the past six years, this formula generates substantial excess capacity which can be used to absorb nonpublic students. The "Low Excess Capacity" formula and the "Crude Excess Capacity" formula generate substantially greater costs for the public sector due to the use of lower more current pupil/teacher ratios. Under the "Low Excess Capacity" formula, the pupil/teacher ratio associated with the peak enrollment year, or the previous year if enrollments have not peaked, is used in the estimation of excess capacity. The "Crude Excess Capacity" assumes that the pupil/teacher ratio does not change. Excess capacity is, therefore, simily the difference between the peak year enrollments and the current enrollment. If enrollments have not peaked, their formula would yield zero excess capacity. A full description of the three formulas plus a discussion of the implications of the assumptions underlying the formulas is found in the Appendix C, p. 585 ff.

Table I

Cost Estimates of Elementary Schools Under the High Excess Capacity Formula, State by State, 1970.

State	Net Influx (NI) Non-Public less high excess capacity	Instruction Costs		Total Teacher Costs	Total Other School Services	Total Other Current Expenditures	Total Current Expenditures	Total Construction Costs	Total Costs
		$NI/{}^{P/T}{}_{H}$ (no. of teachers)	Average Teacher Salary						
Conn.	25,580	921	$ 9,381	$ 8,639,901	$ 1,557,822	$ 4,236,094	$ 14,433,817	$ 75,665,640	$ 90,099,457
Del.	8,928	331	9,598	3,176,938	336,586	1,588,720	5,102,244	21,034,368	26,136,612
Maine	0	0	7,920	0	0	0	0	0	0
Md.	34,959	1,304	9,980	13,013,920	1,861,916	5,414,841	20,290,677	57,437,637	72,784,329
Mass.	124,199	4,901	9,503	46,574,203	8,608,233	21,718,878	76,901,314	231,939,652	318,840,966
N.H.	5,015	181	8,164	1,477,684	327,680	593,156	2,398,520	9,809,340	12,207,860
N.J.	112,756	4,310	9,875	42,561,250	6,785,655	23,018,934	72,365,840	263,059,748	335,425,588
N.Y.	312,353	12,849	10,700	137,484,300	31,597,629	94,899,338	263,981,267	828,672,509	1,092,653,776
Pa.	66,001	2,337	9,200	21,500,400	4,038,601	10,273,452	35,812,453	153,914,332	189,726,785
R.I.	19,951	753	9,425	7,097,025	1,058,600	2,990,384	11,146,009	32,560,032	43,706,041
Vt.	0	0	8,120	0	0	0	0	0	0
Ill.	164,670	6,343	9,900	62,795,700	7,749,370	28,113,895	98,658,965	258,861,240	357,520,205
Ind.	34,712	1,227	9,050	11,104,350	1,952,897	4,970,807	18,028,054	75,116,768	93,144,822
Iowa	11,164	371	8,756	3,248,476	734,033	1,971,496	5,952,005	26,224,236	32,178,241
Kansas	0	0	7,906	0	0	0	0	0	0
Mich.	170,582	5,662	10,500	59,451,000	7,045,036	36,382,957	102,878,993	286,918,924	389,797,917
Minn.	37,724	1,476	9,000	13,284,000	2,498,083	6,281,385	22,063,468	66,318,792	88,382,264
Mo.	31,695	1,122	8,218	9,220,594	1,549,886	3,692,699	14,463,179	34,484,160	48,947,339
Neb.	28,453	1,289	7,640	9,847,960	1,290,059	4,338,422	15,476,441	43,504,637	58,981,078
N.D.	0	0	6,740	0	0	0	0	0	0
Ohio	121,812	3,698	8,489	31,392,322	4,095,319	20,424,350	55,585,561	239,847,828	295,433,389
S.D.	3,743	185	6,300	1,165,500	200,587	523,829	1,889,916	6,991,924	8,881,840
Wisc.	61,183	2,312	9,320	21,547,840	4,015,440	9,364,119	34,927,399	122,671,915	157,599,314
Ala.	0	0	7,298	0	0	0	0	0	0
Ark.	0	0	6,550	0	0	0	0	0	0
Fla.	3,556	134	8,668	1,161,512	134,168	388,348	1,684,028	4,772,152	6,456,180
Ga.	0	0	7,582	0	0	0	0	0	0
Ky.	21,704	821	7,060	5,796,260	1,269,250	1,936,535	9,002,045	23,679,064	32,681,109
La.	25,400	932	8,180	7,623,760	2,088,642	2,988,836	12,701,238	35,483,800	48,185,038
Miss.	0	0	5,911	0	0	0	0	0	0

Table I

Cost Estimates of Elementary Schools Under the High Excess Capacity Formula, State by State, 1970 (con't.).

State	Net Influx (NI) Non-Public less high excess capacity	Instruction Costs		Total Teacher Costs	Total Other School Services	Total Other Current Expenditures	Total Current Expenditures . .	Total Construction Costs	Total Costs
		$NI/^{P}/T_{H}$ (no. of teachers)	Average Teacher Salary						
N.C.	0	0	$ 8,110	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
S.C.	0	0	6,850	0	0	0	0	0	0
Tenn.	0	0	7,130	0	0	0	0	0	0
Vir.	16,077	588	8,400	4,939,200	760,603	1,971,684	7,671,487	33,182,928	40,854,415
W. Vir.	0	0	7,600	0	0	0	0	0	0
Alaska	0	0	13,538	0	0	0	0	0	0
Ariz.	0	0	9,000	0	0	0	0	0	0
Cal.	0	0	10,620	0	0	0	0	0	0
Colo.	24,677	945	8,200	7,749,000	1,115,894	3,666,001	12,530,889	34,646,508	47,177,403
Hawaii	4,990	194	10,120	1,963,280	291,067	809,104	3,063,451	5,484,010	8,547,461
Idaho	2,647	103	6,938	714,614	125,865	369,498	1,209,977	3,787,857	4,997,834
Mon.	0	0	7,774	0	0	0	0	0	0
Nev.	3,578	135	9,411	1,270,485	145,052	565,539	1,981,076	5,041,402	7,022,478
N.M.	8,561	331	8,214	2,727,771	538,829	1,233,130	4,499,730	8,013,096	12,512,826
Okla.	0	0	7,260	0	0	0	0	0	0
Ore.	8,953	368	9,123	3,357,264	460,721	1,558,080	5,376,065	14,503,860	19,879,925
Texas	0	0	8,184	0	0	0	0	0	0
Utah	0	0	8,020	0	0	0	0	0	0
Wash.	25,563	954	9,180	8,757,720	1,271,248	4,513,649	14,542,617	48,493,011	63,035,628
Wyo.	0	0	8,530	0	0	0	0	0	0
Wash. D.C.	0	0	0	0	0	0	0	0	0

II. THE RESULTS OF THE STATE-BY-STATE ANALYSIS

The total cost estimates of absorbing all nonpublic students into the public school system are found in Tables I through VI. These estimates represent the current costs that would have been incurred in 1970-71, plus the total capital expenditures that would have been necessary to accommodate all nonpublic students.

Caution must be exercised in analyzing the estimated construction costs. These costs are seldom, if ever, allocated to one budget year, but instead the costs are spread over the expected life of the school facility. In addition, some capital expenditures may be postponed indefinitely by renting vacant nonpublic school buildings, or by each individual school system using its present facilities more intensely, for example, through the adoption of split sessions.

Table I indicates the total costs of absorbing elementary students State-by-State under the "high excess capacity formula" (Appendix C, p. 585) These costs vary from a high of $1,092,653,776 in New York (note that 75.8 percent of $828,672,509 are construction costs) to zero costs in 21 states. Those states estimated to have zero costs are typically southern states or states that are sparsely populated with relatively few nonpublic students.[5] The total costs for all fifty states and the District of Columbia is estimated to be approximately $3,996,038,857. Of this total only $933,917,487 is current operating costs.

Table II

Cost Estimates of Elementary Schools Under the Low Excess Capacity Formula; State by State.

		INSTRUCTION COSTS							
State	Net Influx (Non Public less Low Excess Capacity)	NI/(P/T) 1970 (No. of Teachers)	Average Teacher Salary	Total Teacher Cost	Total Other School Services	Total Other Current Expenditures	Total Current Expenditures	Total Construction	Total Costs
Connecticut	70,273	2,768	$ 9,381	$ 25,966,608	$ 4,279,626	$ 12,660,398	$ 42,906,632	$207,867,534	$250,774,166
Delaware	15,097	605	9,598	5,806,790	569,157	2,925,279	9,301,226	35,568,532	44,869,758
Maine	12,642	535	7,920	4,237,200	718,066	1,643,424	6,598,690	42,565,614	50,775,184
Maryland	93,686	3,897	9,980	38,892,060	4,989,716	16,088,435	59,970,211	153,926,098	213,896,309
Massachusetts	164,350	6,897	9,503	65,542,191	11,391,099	30,517,889	107,451,179	319,959,000	427,410,179
New Hampshire	16,544	668	8,164	5,453,552	1,080,985	2,181,682	8,716,219	32,360,064	41,076,283
New Jersey	201,856	8,400	9,875	82,950,000	12,147,694	44,912,677	140,010,371	470,930,048	610,940,419
New York	434,286	19,006	10,700	203,364,200	43,932,372	126,447,406	373,743,978	1,152,160,578	1,525,904,556
Pennsylvania	341,029	14,624	9,200	134,540,800	20,867,565	64,363,393	219,771,758	795,279,628	1,015,051,386
Rhode Island	37,558	1,660	9,425	15,645,500	1,992,827	6,608,465	24,246,792	61,294,656	85,541,448
Vermont	9,753	434	8,120	3,524,080	553,930	1,825,173	5,903,183	23,319,423	29,222,606
Illinois	324,837	13,829	9,900	136,907,100	15,286,829	61,690,347	213,884,276	510,643,764	724,528,040
Indiana	53,452	1,944	9,050	17,593,200	3,007,210	7,901,317	28,501,727	115,670,128	144,171,855
Iowa	78,720	3,016	8,756	26,408,096	5,175,840	16,016,922	47,600,858	184,913,280	232,514,138
Kansas	0	0	7,906	0	0	0	0	0	0
Michigan	170,579	5,661	10,500	59,440,500	7,044,913	36,382,318	102,867,731	286,913,878	389,781,609
Minnesota	81,151	3,449	9,000	31,041,000	5,373,819	14,563,335	50,978,154	142,663,458	193,641,612
Missouri	98,164	3,771	8,218	30,990,078	4,800,220	12,442,258	48,232,556	106,802,432	155,034,988
Nebraska	28,453	1,289	7,640	9,847,960	1,290,059	4,383,614	15,521,633	43,504,637	59,026,270
North Dakota	0	0	6,740	0	0	0	0	0	0
Ohio	249,069	8,115	8,489	68,888,235	8,373,700	44,187,331	121,449,266	490,416,861	611,866,127
South Dakota	7,908	405	6,300	2,551,500	423,790	1,141,300	4,116,590	14,772,144	18,888,734
Wisconsin	152,815	6,664	9,320	62,108,480	10,029,248	26,965,552	99,103,280	306,394,075	405,497,355
Alabama	0	0	6,550	0	0	0	0	0	0
Arkansas	3,071	124	6,550	812,200	225,995	406,474	1,444,669	4,210,341	5,655,010
Florida	74,227	3,042	8,668	26,368,056	2,800,585	8,818,902	37,987,543	99,612,634	137,600,177
Georgia	11,004	429	7,582	3,252,678	557,683	1,282,764	1,493,125	12,742,632	17,835,757
Kentucky	45,053	1,793	7,060	12,658,580	2,634,699	4,233,667	19,526,946	45,909,007	65,435,953
Louisiana	84,955	3,472	8,180	28,400,960	6,985,850	9,996,714	45,383,524	118,682,135	164,065,659
Mississippi	0	0	5,911	0	0	0	0	0	0

Table II

Cost Estimates of Elementary Schools Under the Low Excess Capacity Formula; State by State. (con'd.)

		INSTRUCTION COSTS							
State	Net Influx (Non Public less Low Excess Capacity)	NI/(P/T) 1970 (No. of Teachers)	Average Teacher Salary	Total Teacher Cost	Total Other School Services	Total Other Current Expenditures	Total Current Expenditures	Total Construction	Total Costs
North Carolina	0	0	$ 8,110	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
South Carolina	0	0	6,850	0	0	0	0	0	0
Tennessee	0	0	7,130	0	0	0	0	0	0
Virginia	41,167	1,560	8,400	13,104,000	1,947,611	5,259,084	20,310,695	84,968,688	105,279,383
W. Virginia	0	0	7,600	0	0	0	0	0	0
Alaska	2,586	106	13,538	1,435,028	121,258	784,294	2,340,580	7,470,954	9,811,534
Arizona	24,537	1,100	9,000	10,780,000	1,061,069	3,446,251	15,287,320	21,445,338	36,732,654
California	260,526	9,798	10,620	104,054,760	9,316,410	48,277,604	161,648,774	367,081,134	528,729,908
Colorado	24,677	945	8,200	7,749,000	1,115,894	3,666,001	12,530,895	34,646,508	47,177,403
Hawaii	14,850	629	10,120	6,365,480	866,201	2,407,856	9,639,537	16,320,150	25,959,687
Idaho	3,903	153	6,938	1,061,514	185,588	550,384	1,797,486	5,585,193	7,382,679
Montana	0	0	7,774	0	0	0	0	0	0
Nevada	5,097	196	9,411	1,844,556	206,632	821,745	2,872,933	7,181,673	10,054,606
New Mexico	13,885	554	8,214	4,550,556	873,922	2,061,225	7,485,703	12,996,360	20,482,063
Oklahoma	8,532	361	7,260	2,620,860	395,629	1,188,678	4,205,167	7,670,268	11,875,435
Oregon	19,993	855	9,123	7,800,165	1,028,840	3,624,331	12,453,336	32,388,660	44,841,996
Texas	60,570	1,949	8,184	15,950,616	2,340,425	6,928,929	25,219,970	54,997,560	80,217,530
Utah	24,597	996	8,020	7,987,920	1,042,667	4,333,499	13,364,086	37,731,798	51,095,884
Washington	36,017	1,429	9,180	13,118,220	1,791,125	6,765,433	21,674,778	68,324,249	90,000,037
Wyoming	0	0	8,530	0	0	0	0	0	0
Washington D.C.	0	0	0	0	0	0	0	0	0

Table III

Cost Estimates of Elementary Schools Under the Crude Excess Capacity Formula - State by State 1970.

State	Net Influx (Non Pub. less Crude Excess Cap.)	NI/(P/T) 1970 (No. of Teachers)	Instruction Costs		Total Other School Services	Total Other Current Expenditures	Total Current	Total Construction	Total Costs
			Average Teacher Salary	Total Teacher Costs					
Conn.	73,389	2,910	$ 9,381	$ 27,298,710	$ 4,496,390	$13,355,330	$45,123,430	$ 217,084,662	$ 262,208,092
Del.	16,752	688	9,598	6,603,424	631,550	3,312,205	10,547,179	39,467,712	50,014,891
Me.	11,605	488	7,920	3,864,960	659,164	1,493,680	6,017,804	39,074.035	45,091,839
Md.	83,389	3,399	9,980	33,922,020	4,441,298	14,039,372	52,402,690	137,008,127	189,410,817
Mass.	144,061	5,457	9,503	51,857,871	9,984,868	25,971,317	87,814,056	280,630,828	368,444,884
N.H.	19,351	805	8,164	6,572,020	1,264,394	2,630,768	10,467,182	37,850,556	48,317,738
N.J.	228,935	9,792	9,875	96,696,000	13,777,308	52,513,110	162,986,418	534,105,355	697,091,773
N.Y.	548,150	26,215	10,700	280,500,500	55,450,854	173,478,512	509,429,866	1,454,241,950	1,963,681,816
Pa.	377,558	16,751	9,200	154,109,200	23,102,774	73,461,460	250,673,434	880,465,256	1,131,138,690
R.I.	29,051	1,186	9,425	11,178,050	1,541,446	4,732,989	17,452,485	47,411,232	64,863,717
Vt.	6,418	272	8,120	2,208,640	364,478	1,143,752	3,716,870	15,345,438	19,062,308
Ill.	347,536	15,019	9,900	148,688,100	16,355,044	66,667,831	231,710,975	546,326,592	778,037,567
Ind.	57,619	2,191	9,050	19,828,550	3,241,645	8,872,174	31,942,369	124,687,516	156,629,885
Iowa	53,720	1,946	8,756	17,039,176	3,532,090	10,311,554	30,882,820	126,188,280	157,071,100
Kansas	0	0	7,906	0	0	0	0	---	0
Mich.	199,413	6,774	10,500	71,127,000	8,235,757	43,400,245	122,763,002	335,412,666	458,175,668
Minn.	93,949	4,097	9,000	36,873,000	6,221,303	17,381,504	60,475,807	165,162,342	225,638,149
Mo.	108,528	4,226	8,218	34,729,268	5,307,019	13,894,840	53,931,127	118,078,464	172,009,591
Neb.	33,112	1,554	7,640	11,872,560	1,501,298	5,259,179	18,633,037	50,628,248	69,261,285
N.D.	4,205	188	6,740	1,267,120	322,355	606,319	2,195,794	7,392,390	9,588,184
Ohio	253,965	8,300	8,489	70,458,700	8,538,303	45,055,931	124,052,934	500,057,085	624,110,019
S.D.	0	0	6,300	0	0	0	0	---	0
Wisc.	163,672	7,271	9,320	67,765,720	10,741,793	29,470,780	107,978,293	328,162,360	436,140,653
Ala.	0	0	7,298	0	0	0	0	---	0
Ark.	7,683	316	6,550	2,069,800	565,392	1,037,666	3,672,858	10,533,393	14,206,251
Fla.	83,523	3,464	8,668	30,025,952	3,151,323	10,023,595	43,200,870	112,087,866	155,288,736
Ga.	19,177	757	7,582	5,739,574	971,890	2,258,092	8,969,556	22,206,966	31,176,522
Ky.	47,906	1,918	7,060	13,541,080	2,801,543	4,547,238	20,889,861	48,816,214	69,706,075
La.	83,272	3,518	8,180	28,777,240	6,847,457	10,101,726	45,726,423	116,330,984	162,057,407
Miss.	0	0	7,911	0	0	0	0	---	0

Table III

Cost Estimates of Elementary Schools Under the Crude Excess Capacity Formula - State by State 1970 (con't.)

State	Net Influx (Non Pub. less Crude Excess Cap.)	NI/(P/T) 1970 (No. of Teachers)	Instruction Costs		Total Other School Services	Total Other Current Expenditures	Total Current	Construction Costs Per Pupil XNI	Total Costs
			Average Teacher Salary	Total Teacher Costs					
N.C.	2,009	80	$ 8,110	$ 648,800	$ 91,108	$ 200,398	$ 940,306	$ 1,655,416	$ 2,595,722
S.C.	11,938	477	6,850	3,267,450	668,289	1,428,262	5,364,001	13,346,684	18,710,685
Tenn.	17,131	636	7,130	4,534,680	863,060	1,942,998	7,340,738	21,550,798	28,891,536
Va.	41,127	1,558	8,400	13,087,200	1,945,718	5,253,974	20,286,892	84,886,128	105,173,020
W. Va.	0	0	7,600	---	0	0	0	0	0
Alaska	683	27	13,538	365,526	32,026	199,176	596,728	1,973,187	2,569,915
Ariz.	21,590	959	9,000	8,631,000	918,655	2,954,160	12,503;815	18,869,660	31,373,475
Calif.	301,326	11,488	10,620	122,002,560	10,775,418	56,402,201	189,180,179	430,594,854	619,775,033
Colo.	27,061	1,045	8,200	8,569,000	1,223,698	4,060,774	13,853,472	37,993,644	51,847,116
Hawaii	17,584	765	10,120	7,741,800	1,025,675	2,939,341	11,706,816	19,324,816	31,031,632
Ida.	4,799	191	6,938	1,325,158	228,192	683,570	2,236,920	6,867,369	9,104,289
Mont.	5,985	301	7,774	2,339,974	394,052	1,055,275	3,789,301	11,628,855	15,418,156
Nev.	3,578	135	9,411	1,270,485	145,052	565,539	1,981,076	5,041,402	7,022,478
New Mex.	11,468	452	8,214	3,712,728	721,796	1,685,567	6,120,091	10,734,048	16,854,139
Okla.	8,532	361	7,260	2,620,860	395,629	1,188,678	4,205,167	7,670,268	11,875,435
Ore.	18,338	786	9,123	7,170,678	942,757	3,324,313	11,437,748	29,707,560	41,145,308
Texas	95,538	3,128	8,184	25,599,552	3,691,588	11,152,151	40,443,291	86,748,504	127,191,795
Utah	0	0	8,020	---	0	0	0	0	0
Wash.	28,263	1,116	9,180	10,244,880	1,405,519	5,308,922	16,959,321	53,614,911	70,574,232
Wyo.	0	0	8,530	---	0	0	0	0	0
Washington D.C.	9,878	530	10,072 *	5,338,160	418,018	2,399,554	8,155,732	31,844,736	40,000,468

* Mideast average include D.C. - D.C. not otherwise listed

The results of the "low excess capacity" calculations are found in Table II, and indicate that all but ten states and the District of Columbia are subject to positive costs in the absorption of nonpublic students. As is the case with the "high excess capacity" estimate, those states with zero costs are predominantly southern or states that are sparsely populated. New York is again estimated to have the highest total costs of absorbing nonpublic students. This cost is estimated to be $1,525,904,556, of which $1,152,160,578 are related to construction costs. The total cost estimate for the U.S. as a whole is $7,685,434,491, of which $2,147,543,377 is current operating cost.

The "crude excess capacity" estimates in Table III reveal a somewhat higher total cost estimate of absorbing nonpublic students. The massive number of nonpublic students coupled with the high per-pupil costs in New York generates a total cost of $1,963,681,816 which is substantially higher than the $1,131,138,690 estimated for Pennsylvania, the state with the second highest total costs of absorbing nonpublic students. Seven states, Kansas, South Dakota, Alabama, Mississippi, West Virginia, Utah, and Wyoming, have zero costs of absorption. The total costs for the U.S. is estimated to be $9,589,568,091 which is the sum of $2,420,758,734 in current costs and $7,168,809,357 in construction costs.

The results of the state-by-state cost analysis of the secondary schools found in Tables IV, V, and VI, parallel the elementary school

Table IV

Cost Estimates for Secondary Schools, High Excess Capacity, State by State, 1970

State	Net Influx Non-Public Less High Excess Cap.	NI/P/T 1970 No. of Teachers	Instruction Costs: Average Teacher Salary	Instruction Costs: Total Teacher Costs	Total Other School Services	Total Other Current Expenditures	Total Current Expenditures	Total Construction Costs	Total Costs
Conn.	8,113	407	$ 9,823	$ 3,997,961	$ 494,082	$ 1,314,000	5,806,043	$ 35,534,940	$ 41,340,983
Del.	455	21	9,963	209,233	17,154	81,865	308,242	1,353,625	1,661,867
Maine	5,236	286	8,530	2,439,580	297,405	640,230	3,377,215	12,639,704	16,016,919
Md.	0	0	10,212	0	0	0	0	0	0
Mass.	44,452	2,048	9,730	19,927,040	3,080,968	7,773,393	30,781,401	200,522,972	231,304,373
N.H.	13,227	642	8,459	6,072,678	864,252	1,762,247	8,699,177	39,019,650	47,718,827
N.J.	28,168	1,501	10,250	15,385,250	1,695,150	5,944,282	23,024,682	108,446,800	131,471,482
N.Y.	108,526	5,733	11,400	65,356,200	10,978,490	32,628,993	108,963,683	470,351,684	579,315,367
Pa.	32,675	1,441	9,400	13,545,400	1,999,383	5,848,969	21,393,752	159,878,775	181,272,527
R.I.	0	0	9,460	0	0	0	0	0	0
Vermont	0	0	8,940	0	0	0	0	0	0
Ill.	99,697	5,002	10,600	53,021,200	4,691,741	19,124,876	76,837,817	270,677,355	347,515,172
Ind.	0	0	9,500	0	0	0	0	0	0
Iowa	0	0	9,493	0	0	0	0	0	0
Kansas	0	0	8,151	0	0	0	0	0	0
Mich.	0	0	10,800	0	0	0	0	0	0
Minn.	0	0	9,520	0	0	0	0	0	0
Mo.	26,816	1,294	8,561	11,077,934	409,102	3,364,587	14,851,623	54,087,872	68,939,495
Nebr.	812	44	8,680	381,920	36,816	118,652	537,388	2,273,600	2,810,988
N.D.	2,404	128	7,620	975,360	184,291	343,167	1,502,818	8,303,416	9,806,234
Ohio	0	0	9,249	0	0	0	0	0	0
S.D.	0	0	7,800	0	0	0	0	0	0
Wisc.	0	0	10,000	0	0	0	0	0	0
Ala.	0	0	7,451	0	0	0	0	0	0
Ark.	0	0	6,779	0	0	0	0	0	0
Fla.	0	0	8,941	0	0	0	0	0	0
Ga.	0	0	8,068	0	0	0	0	0	0
Ky.	0	0	7,370	0	0	0	0	0	0
La.	6,958	329	8,540	2,809,660	572,156	784,990	5,673,090	16,984,478	22,657,568
Miss.	0	0	6,134	0	0	0	0	0	0

Table IV

Cost Estimates for Secondary Schools, High Excess Capacity, State by State, 1970 (continued)

State	Net Influx Non-Public Less High Excess Cap.	NI/P/T 1970 No. of Teachers	Instruction Costs		Total Other School Services	Total Other Current Expenditures	Total Current Expenditures	Total Construction Costs	Total Costs
			Average Teacher Salary	Total Teacher Costs					
N.C.	0	0	$ 8,290	$ 0	$ 0	$ 0	$ 0	$ 0	$ 0
S.C.	0	0	7,275	0	0	0	0	0	0
Tenn!	0	0	7,800	0	0	0	0	0	0
Virginia	0	0	9,000	0	0	0	0	0	0
W. Vir.	0	0	8,000	0	0	0	0	0	0
Alaska	0	0	13,622	0	0	0	0	0	0
Ariz.	645	27	9,950	268,650	27,445	84,725	380,820	1,075,860	1,456,680
Cal.	76,775	3,097	11,654	36,092,438	2,745,474	14,227,037	53,064,949	174,432,800	227,497,749
Colo.	8,596	4	8,325	33,300	404,990	1,343,937	1,782,227	26,267,948	28,050,175
Hawaii	3,463	125	10,200	1,275,000	201,997	532,565	2,009,562	10,222,776	12,232,338
Idaho	74	3	7,187	21,561	3,519	10,436	35,516	159,100	194,616
Montana	0	0	8,679	0	0	0	0	0	0
Nev.	1,057	45	9,646	434,070	42,851	167,069	643,990	1,760,962	2,404,952
N. Mex.	1,292	54	8,214	443,556	81,318	187,999	712,873	1,683,476	2,396,349
Okla.	0	0	7,500	0	0	0	0	0	0
Ore.	0	0	9,533	0	0	0	0	0	0
Texas	0	0	8,437	0	0	0	0	0	0
Utah	1,249	50	8,130	406,500	52,945	191,347	650,792	3,242,404	3,893,196
Wash.	0	0	9,940	0	0	0	0	0	0
Wyo.	0	0	8,862	0	0	0	0	0	0
Wash. D.C.	0	0	10,531*	0	0	0	0	0	0

* Average of Mideast District including D.C. - D.C. not listed separately.

Table V

Cost Estimates for Secondary Schools Low Excess Capacity, State-by-State 1970

State	Net Influx (Non-Public Less Low Excess Cap.	Instruction Costs			Total Other School Services Per Pupil x NI	Total Other Current Expend.	Total Current Exp.	Total Construction Costs	Total Cost
		NI/PT 1970 No. of Teachers	Average Teacher Salary	Total Teacher Costs					
Connecticut	36,973	2,090	$ 9,823	$ 20,530,070	$2,251,656	$ 6,728,347	$29,510,073	$161,941,740	$191,451,813
Delaware	2,532	122	9,963	1,215,486	95,456	333,613	1,789,625	7,532,700	9,322,325
Maine	8,570	491	8,530	4,188,230	486,776	1,103,045	5,778,051	20,687,980	26,466,031
Maryland	38,061	1,952	10,212	19,933,824	2,027,129	6,515,330	28,496,655	88,758,252	117,254,907
Massachusetts	65,841	3,161	9,730	30,756,530	4,563,440	11,988,513	47,308,483	297,008,751	365,791,407
New Hampshire	14,088	693	8,459	5,862,087	920,510	1,896,111	8,678,708	41,559,600	50,238,308
New Jersey	52,286	2,918	10,250	29,909,500	3,146,571	11,633,562	44,689,633	201,301,100	245,990,733
New York	211,987	11,956	11,400	136,298,400	21,444,605	68,431,439	226,174,444	918,751,658	1,144,926,102
Pennsylvania	129,482	6,213	9,400	58,402,200	7,923,004	25,193,313	91,518,517	633,555,426	725,073,943
Rhode Island	0	0	9,460	0	0	0	0	0	0
Vermont	6,854	432	8,940	3,862,080	389,239	1,245,880	5,452,199	27,457,124	32,954,323
Illinois	102,273	5,147	10,600	54,558,200	4,812,967	19,619,030	78,990,197	277,671,195	356,661,392
Indiana	17,720	810	9,500	7,695,000	996,927	2,701,241	11,393,168	74,282,240	85,675,408
Iowa	22,127	1,730	9,493	16,422,890	1,454,850	4,332,224	22,209,964	54,321,785	76,531,749
Kansas	0	0	8,151	0	0	0	0	0	0
Michigan	90,231	5,021	10,800	54,226,800	3,726,540	20,227,011	78,180,351	304,258,932	382,439,283
Minnesota	17,209	909	9,520	8,653,680	1,139,580	3,151,999	12,945,259	50,663,296	63,608,555
Missouri	32,717	1,612	8,562	13,801,944	1,599,861	4,188,758	19,590,563	65,990,189	85,580,752
Nebraska	12,856	760	8,680	6,596,800	582,891	2,041,918	9,221,609	32,140,000	41,361,609
North Dakota	2,430	130	7,620	990,600	186,284	346,878	1,523,762	8,393,220	9,916,982
Ohio	82,960	5,738	9,249	53,070,762	2,789,418	14,719,530	70,579,710	266,662,366	337,242,076
South Dakota	4,796	281	7,800	2,191,800	257,018	720,136	3,168,954	21,155,156	24,324,110
Wisconsin	26,758	1,490	10,000	14,900,000	1,756,128	4,769,865	21,425,993	70,507,330	91,933,323
Alabama	8,398	374	7,451	2,786,674	575,882	781,080	4,143,636	16,254,656	20,398,292
Arkansas	4,131	197	6,779	1,335,463	304,000	557,933	2,197,396	4,159,917	6,357,313
Florida	19,725	907	8,941	8,109,487	744,224	2,343,525	11,197,236	38,187,600	49,384,836
Georgia	10,642	505	8,068	4,074,340	539,337	1,253,096	5,866,773	21,198,864	27,065,637

Table V

Cost Estimates for Secondary Schools Low Excess Capacity, State-by-State 1970 (con't.)

State	Net Influx (Non-Public Less Low Excess Cap.	Instruction Costs			Total Other School Services Per Pupil x NI	Total Other Current Expend.	Total Current Exp.	Total Construction Costs	Total Cost
		NI/PT 1970 No. of Teachers	Average Teacher Salary	Total Teacher Costs					
Kentucky	13,177	593	$ 7,370	$ 4,370,410	$ 770,591	$ 1,238,253	$ 6,379,254	$20,556,120	$ 26,935,374
Louisiana	37,128	1,918	8,540	16,379,720	3,060,436	4,560,065	24,000,221	90,849,138	114,849,359
Mississippi	5,022	214	6,134	1,312,676	273,096	378,508	1,964,280	3,138,750	5,103,030
North Carolina	656	30	8,290	248,700	29,750	64,782	343,232	1,078,464	1,421,696
South Carolina	0	0	7,275	0	0	0	0	0	0
Tennessee	14,095	615	7,800	4,797,000	710,106	1,614,642	7,121,748	30,529,770	37,651,518
Virginia	17,996	894	9,000	8,046,000	851,391	2,298,989	11,196,380	59,584,756	70,781,136
West Virginia	0	0	8,000	0	0	0	0	0	0
Alaska	0	0	13,622	0	0	0	0	0	0
Arizona	4,343	187	9,950	1,860,650	184,795	588,310	2,633,755	7,244,124	9,877,879
California	97,655	3,939	11,654	45,905,106	3,492,143	18,096,272	67,493,521	221,872,160	289,365,681
Colorado	14,869	724	8,325	6,027,300	672,376	2,275,867	8,975,543	43,610,777	52,586,320
Hawaii	9,588	374	10,200	3,814,800	559,268	1,602,730	5,976,798	28,303,776	34,280,574
Idaho	2,157	98	7,187	704,326	102,565	310,315	1,117,206	4,637,550	5,754,756
Montana	0	0	8,679	0	0	0	0	0	0
Nevada	1,610	70	9,646	675,220	65,269	257,022	997,511	2,682,260	3,679,771
New Mexico	3,946	168	8,214	1,379,952	248,361	585,783	2,214,096	5,141,638	7,355,734
Okla.	19,256	989	7,500	7,417,500	892,901	2,843,711	11,154,112	34,179,400	45,333,512
Oregon	10,723	524	9,533	4,995,292	551,806	1,982,742	7,529,840	21,885,643	29,415,483
Texas	16,199	1,258	8,437	10,613,747	625,929	1,872,000	13,111,676	26,793,146	39,904,822
Utah	4,025	163	8,130	1,325,190	170,620	628,963	2,124,773	10,448,900	12,573,673
Washington	12,446	527	9,940	5,238,380	618,940	2,336,612	8,193,932	30,156,658	38,350,590
Wyoming	0	0	8,862	0	0	0	0	0	0
Washington, D.C.*	5,155	286	10,531	3,011,866	194,344	3,436,574	4,251,670	11,315,225	15,566,895

*Average mid-east including D.C.: D. C. not listed separately

Table VI

Cost Estimates for Secondary Schools Crude Excess Capacity, State by State, 1970.

State	Net Influx (Non Public less Crude Excess Cap.)	N/I/P/T 1970 No. of Teachers	Instruction Costs Average Teacher Salary	Total Teacher Costs	Total Other School Services	Total Other Current Expenditures	Total Current	Total Construction	Total Costs
Conn.	36,943	2,088	$ 9,823	$ 20,510,424	$ 2,249,829	$ 6,640,996	$29,401,249	$161,810,340	$191,211,589
Del.	5,985	305	9,963	3,038,715	225,634	1,183,354	4,447,703	22,253,078	22,253,078
Me.	8,416	481	8,530	4,102,930	478,029	1,083,223	5,664,182	20,316,224	25,980,406
Md.	29, 931	1, 503	10,212	15, 348,636	1,594,525	5,039,183	21,982,344	91,781,436	91,781,436
Mass.	60,950	2,898	9,730	28,197,540	4,224,445	10,988,066	43,410,051	274,945,450	318,355,501
N.H.	14,909	737	8,459	6,234,283	967,620	2,013,284	9,215,187	43,686,550	52,901,737
N.J.	69,613	4,017	10,250	41,174,250	4,189,310	15,967,830	61,331,390	268,010,050	329,341,440
N.Y.	185,772	10,304	11,400	117,465,600	18,792,696	58,793,123	195,051,419	805,135,848	1,000,187,267
Pa.	133,818	6,446	9,400	60,592,400	8,188,323	26,036,968	94,817,691	654,771,474	749,589,165
R.I.	8,290	480	9,460	4,540,800	439,867	1,350,607	6,331,274	38,001,360	44,332,634
Vt.	6,112	378	8,940	3,379,320	347,100	1,089,220	4,815,640	24,484,672	29,300,312
Ill.	104,188	5,254	10,600	55,692,400	4,903,087	19,986,384	80,581,871	282,870,420	363,452,291
Ind.	21,516	990	9,500	9,405,000	1,210,490	3,313,034	13,928,524	90,195,072	104,123,596
Iowa	18,519	1,421	9,493	13,489,553	1,217,624	3,554,722	18,261,899	45,464,145	63,726,044
Kansas	5,486	334	8,151	2,722,434	319,505	813,848	3,855,787	19,014,476	22,870,263
Mich.	64,676	3,504	10,800	37,843,200	2,671,119	14,076,085	54,590,404	218,087,472	272,677,876
Minn.	23,528	1,261	9,520	12,004,720	1,558,024	4,352,915	17,915,659	69,266,432	87,182,091
Mo.	33,826	1,674	8,561	14,331,114	1,654,091	4,330,743	20,315,948	68,227,042	88,542,990
Neb.	11,944	710	8,680	6,162,800	541,541	1,897,066	8,601,407	29,886,000	38,487,407
N.D.	2,779	151	7,620	1,150,620	213,038	400,704	1,764,362	9,598,666	11,363,028
Ohio	85,187	5,916	9,249	54,717,084	2,863,987	15,113,026	72,694,097	273,791,018	346,485,115
S.D.	3,162	180	7,800	1,404,000	169,452	460,956	2,034,408	13,947,582	15,981,990
Wisc.	32,150	1,813	10,000	18,130,000	2,110,005	5,788,929	26,028,934	84,715,250	110,744,184
Ala.	1,287	57	7,451	424,764	88,275	119,730	632,769	2,491,632	3,124,401
Ark.	3,149	150	6,779	1,016,850	231,735	425,304	1,673,889	3,171,043	4,844,932
Fla.	28,814	1,345	8,941	12,025,645	1,087,152	3,457,968	16,570,765	44,259,304	60,830,069
Ga.	9,876	467	8,068	3,767,756	500,517	1,162,899	5,431,172	19,672,992	25,104,164
Ky.	16,736	763	7,370	5,623,310	978,721	1,588,581	8,190,612	26,108,160	34,298,772
La.	33,534	1,709	8,540	14,594,860	2,757,501	4,068,010	21,420,371	81,856,494	103,276,865
Miss.	5,022	214	6,134	1,312,676	273,096	378,508	1,964,280	3,126,250	5,090,530

Table VI

Cost Estimates for Secondary Schools Crude Excess Capacity, State by State, 1970 (con't.).

State	Net Influx (Non Public less Crude Excess Cap.)	N/I/P/T 1970 No. of Teachers	Instruction Costs Average Teacher Salary	Total Teacher Costs	Total Other School Services	Total Other Current Expenditures	Total Current	Total Construction	Total Costs
N.C.	[illegible],666	167	$ 8,290	$ 1,384,430	$ 166,253	$ 365,684	$1,916,367	$ 6,026,904	$ 7,943,271
S.C.	5,620	271	7,275	1,971,525	314,608	672,377	2,958,510	8,581,740	11,540,250
Tenn.	12,036	522	7,800	4,071,600	606,374	1,365,123	6,043,097	26,069,976	32,113,073
Va.	17,996	894	9,000	8,046,000	851,391	2,298,989	11,196,380	59,584,756	70,781,136
W. Va.	0	---	8,000	---	0	0	0	0	0
Alaska	493	25	13,622	340,550	23,117	143,767	507,434	2,548,317	3,055,751
Ariz.	5,739	249	9,950	2,477,550	244,194	785,267	3,507,011	9,687,432	13,194,443
Calif.	97,655	3,986	11,654	46,452,844	3,492,143	18,279,063	68,224,050	221,872,160	290,096,210
Colo.	8,956	426	8,325	3,546,450	404,990	1,343,937	5,295,377	26,267,948	31,563,325
Hawaii	9,954	390	10,200	3,978,000	580,617	1,663,911	6,222,528	29,384,208	35,606,736
Idaho	1,238	55	7,187	395,285	58,867	176,341	630,493	2,661,700	3,292,193
Mont.	3,069	159	8,679	1,379,961	202,063	541,126	2,123,150	10,032,561	12,155,711
Nev.	1,057	45	9,646	434,070	42,851	167,069	653,990	1,760,962	2,414,952
New Mex.	2,877	122	8,214	1,002,108	181,078	422,861	1,606,047	3,748,731	5,354,778
Okla.	2,696	130	7,500	975,000	125,014	375,607	1,475,621	4,785,400	6,261,021
Oreg.	6,888	331	9,533	3,155,423	354,456	1,248,657	4,758,536	14,058,408	18,816,944
Texas	24,523	1,926	8,437	16,249,662	947,569	2,862,570	20,059,801	40,561,042	60,620,843
Utah	1,249	50	8,130	406,500	52,945	191,347	650,792	3,242,404	3,893,196
Wash.	12,592	534	9,940	5,307,960	626,200	2,365,281	8,299,441	30,510,416	38,809,857
Wyo.	173	15	8,862	132,930	11,041	23,173	4,383,174	465,716	4,848,890
Wash., D.C.	16,726	947	10,531 *	9,972,857	214,023	1,228,560	4,823,034	12,461,015	17,284,049

* Average mideast including D.C.: D.C. not listed seperately

analysis. Under the "high excess capacity" formula, thirty states, which includes all of the southern states except Louisiana and the majority of the sparsely populated states have zero costs of absorption. This large number of zero cost states is the result of rapidly declining pupil/teacher ratio, and the relatively small enrollments in nonpublic secondary schools (compared to the elementary level). The importance of the declining pupil/teacher ratios at the secondary level is clearly shown when Table V the "low excess capacity" estimate is compared to Table IV, the "high excess capacity" estimate. Since the analysis in Table V employs the previous years pupil/teacher ratio or the peak enrollment year's pupil/teacher ratio--generally 1969--the amount of excess capacity is drastically reduced and costs drastically increased. Thus using this capacity formula only seven states have zero costs. Only one state, West Virginia has experienced an absolute decline in secondary enrollments large enough to absorb all secondary nonpublic students, therefore, it is the only state under the "crude excess capacity" formula to have zero costs.

The greatest total costs of absorbing nonpublic students consistently falls to New York. These costs are estimated to be $579,315,367 under the "high excess capacity" formula, $1,144,926,102 under the "low excess capacity" formula, and $1,000,187,267 under the "crude excess capacity" formula.[6] A number of other states such as Pennsylvania,

TABLE VII

Comparison of Estimated Average Marginal Costs with Current Average Costs per Pupil in ADM, State-by-State, High Excess Capacity

State	Elementary School			Secondary School			Elementary and Secondary School			Annual Average Current Expenditures per Pupil in ADM
	Total Current Expenditures	Total Nonpublic Elementary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Secondary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Enrollment	Average Marginal Costs	
Connecticut	14,433,817	73,389	197	5,806,043	36,943	157	73,939,860	110,332	670	916
Delaware	5,102,244	16,296	313	308,242	5,985	52	5,410,486	16,296	332	891
Maine	0	---	0	3,377,215	8,416	401	3,377,215	8,416	401	723
Maryland	20,290,677	83,389	243	0	---	0	20,290,677	83,389	243	888
Massachusetts	76,901,314	144,061	534	30,781,401	60,950	505	107,682,715	205,011	525	841
New Hampshire	2,398,520	19,351	124	8,699,177	14,809	587	11,097,697	34,160	325	687
New Jersey	72,365,840	228,935	316	23,024,682	69,613	331	95,390,522	298,548	320	1,054
New York	263,981,267	612,438	431	108,963,683	185,772	587	372,944,950	798,210	467	1,247
Pennsylvania	35,812,453	384,617	93	21,393,752	133,818	160	57,206,205	518,435	110	892
Rhode Island	11,146,009	29,051	384	0	---	0	11,146,009	29,051	384	915
Vermont	0	---	0	0	---	0	0	---	0	1,008
Illinois	98,658,965	347,536	284	76,837,817	104,188	737	175,496,782	451,724	389	872
Indiana	18,028,054	86,420	209	0	---	0	18,028,054	86,420	209	731
Iowa	5,952,005	53,720	111	0	---	0	5,952,005	53,720	111	902
Kansas	0	---	0	0	---	0	0	---	0	---
Michigan	102,878,993	199,413	516	0	---	0	102,878,993	199,413	516	937 1
Minnesota	22,063,468	93,949	235	0	---	0	22,063,468	93,949	235	971
Missouri	14,463,179	108,528	133	14,851,623	33,826	439	29,314,802	142,354	206	747 1
Nebraska	15,476,441	35,312	438	537,388	13,518	40	16,013,829	48,830	328	653
North Dakota	0	---	0	1,502,818	3,150	477	1,502,818	3,150	477	665
Ohio	55,585,561	253,965	219	0	---	0	55,585,561	253,965	219	729
South Dakota	1,889,916	9,052	209	0	---	0	1,889,916	9,052	209	680
Wisconsin	34,927,399	163,672	213	0	---	0	34,927,399	163,672	213	930
Alabama	0	---	0	0	---	0	0	---	0	463
Arkansas	0	---	0	0	---	0	0	---	0	549
Florida	1,684,028	83,523	20	0	---	0	1,684,028	83,523	20	728
Georgia	0	---	0	0	---	0	0	---	0	615
Kentucky	9,002,045	47,906	188	0	---	0	9,002,045	47,906	188	680
Louisiana	0	102,179	0	5,673,090	33,534	169	5,673,090	135,713	42	747
Mississippi	0	---	0	0	---	0	0	---	0	495
North Carolina	0	---	0	0	---	0	0	---	0	607
South Carolina	0	---	0	0	---	0	0	---	0	---

TABLE VII

Comparison of Estimated Average Marginal Costs with Current
Average Cost per Pupil in ADM, State-by-State, High Excess Capacity (continued)

State	Elementary School			Secondary School			Elementary and Secondary School			Annual Average Current Expenditures per Pupil in ADM
	Total Current Expenditures	Total Nonpublic Elementary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Secondary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Enrollment	Average Marginal Costs	
Tennessee	0	---	0	0	---	0	0	---	0	571
Virginia	7,671,487	16,077	477	0	---	0	7,671,487	16,077	477	753
West Virginia	0	---	0	0	---	0	0	---	0	---
Alaska	0	---	0	0	----	0	0	---	0	1,330
Arizona	0	---	0	380,820	5,739	66	380,820	5,739	66	768
California	0	---	0	53,064,949	97,665	543	53,064,949	97,665	543	866
Colorado	12,530,889	24,677	508	1,782,227	8,956	199	14,313,116	33,633	426	735
Hawaii	3,063,451	4,990	614	2,009,562	9,954	202	5,073,013	14,944	339	951 [1]
Idaho	1,209,977	2,647	457	35,516	1,238	29	1,245,493	3,885	321	629 [1]
Montana	0	---	0	0	---	0	0	---	0	---
Nevada	1,981,076	3,578	554	643,990	1,057	609	2,625,066	4,635	566	756
New Mexico	4,499,730	11,468	392	712,873	2,877	248	5,212,603	14,345	363	751
Oklahoma	0	---	0	0	---	0	0	---	0	659
Oregon	5,376,065	20,553	262	0	---	0	5,376,065	20,553	262	875
Texas	0	---	0	0	---	0	0	---	0	599
Utah	0	---	0	650,792	1,249	521	650,792	1,249	521	611
Washington	14,542,617	34,070	427	0	---	0	14,542,617	34,070	427	873 [1]
Wyoming	0	---	0	0	---	0	0	---	0	---
Washington, D.C.	0	---	0	0	---	0	0	---	0	971

---

[1] Average Daily Attendance.

Illinois, New Jersey, California, Ohio and Michigan also experience sizeable costs. Indeed, these six states plus New York account for approximately 72.4 percent of the total U.S. costs under the "high excess capacity" formula, 64.6 percent under the "low excess capacity" formula and 63.4 percent under the "crude excess capacity" formula.

The total costs estimate for all states and the District of Columbia at the secondary level is $2,025,840,857 for the "high capacity," $5,387,237,840 for the "low capacity," and $5,287,087,802 for the "crude capacity" estimate. The estimates represent costs equal to slightly more than 50 percent of the elementary costs. The current costs--total costs less construction costs--are estimated to be $414,737,660 under the "high capacity" estimate, $1,028,828,508 under the "low capacity" estimate and $1,008,260,121 under the "crude capacity" estimate. These costs are slightly less than 50 percent of the elementary current costs.

The estimated average marginal costs[7] of absorbing nonpublic students into the public school system are compared to the existing current expenditures per pupil in Table VII. Under the "high excess capacity" formula no state experiences an average marginal cost equal to or greater than the current operating cost per pupil. Indeed, the average marginal are substantially below the comparable average cost

TABLE VIII

Comparison of Estimated Average Marginal Costs with Current
Average sosts per Pupil in ADM, State-by-State, Low Excess Capacity

State	Elementary School			Secondary School			Elementary and Secondary School			Annual Average Current Expenditures per Pupil in ADM
	Total Current Expenditures	Total Nonpublic Elementary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Secondary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Enrollment	Average Marginal Costs	
Connecticut	42,906,632	73,889	581	29,510,073	36,943	799	72,416,705	110,832	653	916
Delaware	9,301,226	16,926	550	1,789,625	5,985	299	11,090,851	22,911	484	891
Maine	6,598,690	11,605	569	5,778,051	8,416	687	12,376,741	20,021	618	723
Maryland	59,970,211	83,389	719	28,496,655	29,931	952	88,466,866	113,320	781	888
Massachusetts	107,451,179	144,061	746	47,308,483	60,950	776	154,759,662	205,011	755	841
New Hampshire	8,716,219	19,351	450	8,678,708	14,809	586	17,394,927	34,160	509	687
New Jersey	140,010,371	228,935	612	44,689,633	69,613	642	184,700,004	298,548	619	1,054
New York	373,743,978	612,438	610	226,174,444	185,772	1,217	599,918,422	798,210	752	1,247
Pennsylvania	219,771,758	384,617	571	91,518,517	133,818	684	311,290,275	518,435	600	892
Rhode Island	24,246,792	29,051	835	0	---	0	24,246,792	29,051	835	915
Vermont	5,903,183	6,418	920	5,452,199	6,112	892	11,355,382	12,530	906	1,008
Illinois	213,884,276	347,536	615	78,990,197	104,188	758	292,874,473	451,724	648	872
Indiana	28,501,727	86,420	330	11,393,168	21,516	530	39,894,895	107,936	370	731
Iowa	47,600,858	53,720	886	22,209,964	18,519	1,199	69,810,822	72,239	966	902
Kansas	0	---	0	0	---	0	0	---	0	---
Michigan	102,867,731	199,413	516	78,180,351	64,676	1,209	181,048,082	264,089	686	937[1]
Minnesota	50,978,154	93,949	543	12,945,259	25,528	507	63,923,413	117,477	544	971
Missouri	48,232,556	108,528	444	19,590,563	33,826	579	67,823,119	142,354	476	747[1]
Nebraska	15,521,633	35,312	440	9,221,609	13,518	682	24,743,242	48,830	507	653
North Dakota	0	---	0	1,523,762	3,150	484	1,523,762	3,150	484	665
Ohio	121,449,266	253,965	478	70,597,710	85,470	826	192,046,976	339,435	566	729
South Dakota	4,116,590	9,052	455	3,168,954	3,162	1,002	7,285,544	12,214	596	680
Wisconsin	99,103,280	163,672	605	21,425,993	32,150	666	120,529,273	195,822	616	930
Alabama	0	---	0	4,143,636	8,378	495	4,143,636	8,378	495	463
Arkansas	1,444,669	7,683	188	2,197,396	3,149	698	3,642,065	10,832	336	549
Florida	37,987,543	83,523	455	11,197,236	28,814	389	49,184,779	112,337	438	728
Georgia	1,493,125	19,177	78	5,866,773	9,876	594	7,359,898	29,053	253	615
Kentucky	19,526,946	47,906	408	6,379,254	16,736	381	25,906,200	64,642	401	680
Louisiana	45,383,524	102,179	444	24,000,221	33,534	716	69,383,745	135,713	511	747
Mississippi	0	---	0	1,964,280	5,022	391	1,964,280	5,022	391	495
North Carolina	0	---	0	343,232	3,666	94	343,232	3,666	94	607
South Carolina	0	---	0	0	---	0	0	---	0	---

[1] Average daily attendance

TABLE VIII

Comparison of the Estimated Average Marginal Costs and Current Average Costs per Pupil in ADM, State-by-State Low Excess Capacity (continued)

State	Elementary School			Secondary School			Elementary and Secondary School			
	Total Current Expenditures	Total Nonpublic Elementary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Secondary Enrollment	Average Marginal Costs	Total Current Expenditures	Total Nonpublic Enrollment	Average Marginal Costs	
Utah	13,364,086	3,255	4,106	2,124,773	1,249	1,701	15,488,859	4,504	3,439	611
Washington	21,674,778	34,070	636	8,193,932	12,592	651	29,868,710	46,662	640	873[1]
Wyoming	0	---	0	0	---	0	0	---	0	---
Washington, D.C.	0	---	0	4,251,670	6,206	685	4,251,670	6,206	685	971
Tennessee	0	---	0	7,121,748	12,036	592	7,121,748	12,036	592	571
Virginia	20,310,695	41,127	494	11,196,380	17,996	622	31,507,075	59,123	533	753
West Virginia	0	---	0	0	---	0	0	---	0	---
Alaska	2,340,580	683	3,427	0	---	0	2,340,580	683	3,427	1,330
Arizona	15,287,320	21,590	708	2,633,755	5,739	459	17,921,075	27,329	656	768
California	161,648,774	301,326	536	67,493,521	97,655	691	229,142,295	398,981	574	866
Colorado	12,530,895	27,061	463	8,975,543	8,956	1,002	21,506,438	36,017	597	735
Hawaii	9,639,537	17,584	548	5,976,798	9,954	600	15,616,335	27,538	567	951[1]
Idaho	1,797,486	2,647	679	1,117,206	1,238	902	2,914,692	3,885	750	629[1]
Montana	0	---	0	0	---	0	0	---	0	---
Nevada	2,872,933	3,578	803	997,511	1,057	944	3,870,444	4,635	835	756
New Mexico	7,485,703	11,468	653	2,214,096	2,877	770	9,699,799	14,345	676	751
Oklahoma	4,205,167	8,532	493	11,154,112	2,696	4,137	15,359,279	11,228	1,368	659
Oregon	12,453,336	20,553	606	7,529,840	6,888	1,093	19,983,176	27,441	728	875
Texas	25,219,970	95,538	264	13,111,676	24,523	535	38,331,646	120,061	319	599

figures. In several states the marginal costs approaches the average cost at the elementary level. For example, the average marginal costs in Colorado and Nevada are $508 and $554 respectively, while the average current expenditure per pupil in these states were $735 and $756, respectively. At the secondary level, California, Nevada and Utah each experience relatively high marginal costs compared to average current expenditure per pupil.

Comparisons of average marginal costs calculated with the "low excess capacity" formula and average current expenditure per pupil are found in Table VIII. This table generally indicates a higher marginal cost than was computed under the "high excess capacity" formula. Indeed four states at the elementary level and sixteen states at the secondary level, realize average marginal costs in excess of average current expenditures per pupil. With the exception of Ohio, Michigan and Maryland, states with high marginal costs have relatively few nonpublic students to absorb. In addition, it should be noted that the extraordinary marginal costs in elementary schools in the states of Alaska and Utah and the high marginal costs in the secondary schools of South Dakota, Colorado, Oklahoma and Utah are the result of negative excess capacities in these states. Twenty-one states at the elementary level and thirteen states at the secondary level have experienced an increase in their pupil/teacher ratios since their peak or previous year. Those students that represent an over-utilization of public school capacity are added to the nonpublic enrollment in the calculation of the total costs of absorption. However, these total costs are divided by only the nonpublic students in the determination of marginal costs. Thus marginal costs in those states with a negative "low excess capacity" measures both the costs of absorbing nonpublic students and the costs of improving the standards in the public school system.

The marginal cost calculations therefore generate a high and a low cost estimate. If pupil/teacher ratios are allowed to revert to their historically high levels, the total current cost of absorbing all nonpublic students is $1,348,655,147. If pupil/teacher ratios are maintained at the peak enrollment year or previous year level the estimated costs is $3,176,371,885. These increases in annual current expenditures are substantial, but not as high as some projections have indicated. For example, the marginal cost of absorbing nonpublic students has been calculated by some authors to be simply the product of average current expenditures per pupil times the number of nonpublic students. If 1970 figures are used, this calculation is: $812. x 5,282,567 = $4,289,444,404. Thus the costs calculated with the use of this simplistic technique are significantly higher than the "low excess capacity" or high average marginal cost estimate.[8]

Although the methodology used to estimate "high excess capacity costs" and "low excess capacity costs," appears to be superior to the simple multiplication of average cost in the public sector and the number of nonpublic students, this methodology also makes a sweeping assumption. Since the analysis is conducted across a whole state, it is implicitly assumed that all the excess capacity can be made available to the nonpublic students. In reality, the capacity may be in one part of the state and the nonpublic students in another. This objection is essentially eliminated in the "crude capacity" calculation. Excess capacity is generated only when overall enrollments in the state are declining. Although this formula generates relatively little excess capacity, the total costs of absorbing all nonpublic students is $3,429,018,855 or nearly one billion dollars less than the simple calculation.

III. THE RESULTS OF THE STATE-SUBDIVISIONS ANALYSIS

This analysis was conducted in an attempt to improve upon the accuracy of the State-by-State analysis. It was hoped that by segregating each state into three separate regions, a greater correspondence of capacity and nonpublic students could be achieved. The grouping of school districts was done with the aid of data collected by the National Center

Table IX

Cost Estimates for K-12 in Central Cities Within SMSA's, Under High and Low Excess Capacity Formulas, by State, 1969

	HIGH EXCESS CAPACITY					LOW EXCESS CAPACITY				
State	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs
Conn.	$ 660,435	$ 1,916,929	$ 30,598,152	$ 5,093,880	$ 38,269,396	$1,102,225	$ 3,308,362	$ 51,066,408	$ 8,816,680	$ 64,293,675
Del.	512,911	1,691,063	25,235,162	3,212,900	30,652,036	512,911	1,691,063	25,235,162	3,212,900	30,652,036
Maine	347,008	792,291	13,728,465	2,204,325	17,072,089	428,428	1,036,851	16,949,610	2,893,650	21,308,539
Md.	---	---	---	---	---	---	---	---	---	---
Mass.	4,097,357	9,234,914	165,075,192	21,602,100	200,009,563	4,097,357	9,234,914	165,075,192	21,602,100	200,059,563
N.H.	478,962	983,936	11,900,064	2,442,375	15,805,337	478,962	983,936	11,900,064	2,442,375	15,805,337
N.J.	5,365,677	20,605,375	211,822,988	35,140,375	272,934,415	5,619,764	22,012,727	221,853,684	37,722,750	287,208,925
N.Y.	41,405,782	130,514,538	1,146,367,404	181,050,500	1,499,338,224	53,818,976	184,909,814	1,490,041,176	257,418,600	1,986,188,566
Pa.	10,108,370	29,015,707	474,614,192	56,767,500	570,505,769	14,528,632	47,009,296	682,157,008	92,568,000	836,262,936
R.I.	668,697	1,841,259	24,838,450	4,994,136	32,342,542	1,300,438	4,465,860	48,304,200	12,066,960	66,137,458
Vermont	---	---	---	---	---	---	---	---	---	---
Ill.	10,014,901	40,220,114	408,734,560	80,325,700	539,295,275	11,032,162	45,754,833	450,251,664	91,160,600	598,199,259
Ind.	1,648,969	4,287,942	75,425,924	10,820,576	92,183,411	3,107,583	8,654,867	142,144,758	21,805,654	175,712,862
Iowa	2,090,121	6,148,090	55,056,510	11,352,880	74,647,601	2,642,524	8,317,031	69,607,520	15,313,584	95,880,659
Kansas	318,939	749,022	10,066,870	1,724,800	12,859,631	1,004,612	2,578,524	31,709,170	5,952,100	41,244,406
Mich.	3,407,404	17,653,124	198,151,779	28,987,673	248,199,680	5,011,476	28,197,289	291,433,856	46,384,206	371,026,827
Minn.	2,115,917	5,646,065	69,183,986	11,678,800	88,624,768	2,658,935	7,484,095	86,939,042	15,411,200	112,493,272
Mo.	558,821	1,282,665	21,080,248	3,278,675	26,200,409	558,821	1,282,665	21,080,248	3,278,675	26,200,409
Nebr.	871,663	2,978,198	37,178,960	5,493,980	46,522,801	1,522,254	3,658,317	44,207,800	6,773,400	54,791,771
N.D.	385,570	716,096	10,581,120	1,568,320	13,251,106	385,570	716,096	10,581,120	1,568,320	13,251,106
Ohio	2,452,385	11,735,638	124,014,400	22,164,600	160,367,023	2,452,385	11,735,638	124,014,400	22,164,600	160,367,023
S.D.	201,569	524,926	8,393,700	1,096,200	10,216,395	201,569	524,926	8,393,700	1,096,200	10,216,395
Wisc.	3,783,246	10,034,297	133,257,600	21,555,000	168,630,143	3,906,422	10,447,483	137,596,200	22,419,000	174,369,105
Ala.	0	0	0	0	0	0	0	0	0	0
Ark.	142,953	246,091	2,518,080	495,567	3,402,691	295,879	530,711	5,211,840	1,072,683	7,111,113
Fla.	577,697	1,736,182	18,427,112	5,212,400	25,953,391	1,452,306	4,653,349	46,324,971	13,968,900	66,399,526
Ga.	0	0	0	0	0	434,833	1,028,102	13,291,128	2,638,560	17,392,623
Ky.	0	0	0	0	0	1,286,010	2,018,970	31,355,830	6,956,400	41,617,210
La.	3,039,028	4,300,741	63,537,242	10,981,290	81,858,301	3,275,377	4,674,152	68,478,614	11,973,870	88,402,013
Miss.	0	0	0	0	0	0	0	0	0	0

Table IX

Cost Estimates for K-12 in Central Cities Within SMSA's, Under High and Low Excess Capacity Formulas, by State, 1969 (con't.)

	HIGH EXCESS CAPACITY					LOW EXCESS CAPACITY				
State	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs
N.C.	$ 308,321	$ 624,767	$ 8,335,510	$ 1,994,992	$ 11,263,590	$ 364,524	$ 768,171	$. 9,854,958	$ 2,456,520	$ 13,444,173
S.C.	210,404	453,119	4,085,862	999,000	5,748,385	227,736	495,329	4,422,429	1,093,500	6,238,994
Tenn.	0	0	0	0	0	0	0	0	0	0
Virginia	37,437	97,555	1,602,328	272,000	2,009,320	397,831	1,071,368	17,027,504	3,208,000	21,704,703
W. Va.	30,261	54,386	840,496	152,200	1,077,343	116,828	214,863	3,244,892	608,800	4,185,383
Alaska	---	---	---	---	---	---	---	---	---	---
Ariz.	315,354	980,864	11,055,096	2,753,940	15,105,254	315,354	980,864	11,055,096	2,753,940	15,105,254
Calif.	4,298,069	22,274,975	199,185,094	48,815,085	274,573,223	6,615,288	34,845,276	306,571,800	76,568,700	424,601,064
Colo.	370,442	1,158,067	12,307,456	2,667,600	16,503,565	722,796	2,368,279	24,013,962	5,472,000	32,577,037
Hawaii	193,193	521,551	6,724,809	1,274,400	8,713,953	481,089	1,402,956	16,746,093	3,445,600	22,075,738
Idaho	111,273	335,784	3,433,054	640,212	4,520,323	158,182	510,734	4,908,726	970,644	6,548,286
Mont.	331,601	867,825	8,540,196	1,552,950	11,292,572	331,601	867,825	8,540,196	1,552,950	11,292,572
Nev.	---	---	---	---	---	71,359	294,301	2,150,500	699,075	3,215,235
N.M.	182,933	408,882	2,970,656	862,400	4,424,876	182,933	408,882	2,970,656	862,400	4,424,871
Okla.	153,735	455,993	3,726,276	859,401	5,195,405	153,735	455,993	3,726,276	859,401	5,195,405
Ore.	391,411	1,347,674	13,464,612	3,024,575	18,228,272	391,411	1,347,674	13,464,612	3,024,575	18,228,272
Texas	2,626,896	7,994,807	81,327,602	18,631,275	110,585,580	6,546,564	21,716,879	202,678,874	50,757,675	736,699,992
Utah	126,531	460,828	4,612,088	851,200	6,050,647	344,211	1,366,488	12,546,566	2,523,200	16,470,465
Wash.	810,943	3,005,709	34,711,412	5,938,450	44,466,514	1,673,539	6,750,420	71,633,804	13,275,775	93,333,538
Wyo.	---	---	---	---	---	---	---	---	---	---
Wash., D.C.	---	---	---	---	---	---	---	---	---	---

for Educational Statistics and published in their Statistics of Local Public School Systems. The NCES data provide a basis for estimating pupil/teacher ratios by SMSA areas. These ratios used in conjunction with the estimated percentage of school age children by SMSA area made it possible to calculate the "high excess capacity" cost estimates and the "low excess capacity" cost estimates.

The data limitations causes several problems in the calculation of the cost estimates.[9] The most important limitation was the fact that nonpublic non-Catholic data are not available on a regional basis; therefore the cost estimations only pertain to the Catholic nonpublic enrollment. In many states and in many regions within states, this is a minor problem since the nonpublic non-Catholic enrollments are small, however, where the nonpublic non-Catholic enrollments are large the estimated costs are understated.[10] This understatement of costs is more than offset by the time constraint placed upon the analysis. Only three years could be used: 1967-68, 1968-69, and 1969-70. If the analysis could have been spread over six years it is quite probable that the capacity estimates would have been larger and the cost estimates lower due to the higher pupil/teacher ratios generally found prior to 1967.

In the three subdivisions of the states the most persistent costs are found in the central cities. Table IX indicates that under the "high

Table X

Cost Estimates for K-12 in Other-SMSA Under High and Low Excess Capacity Formulas, by State, 1969

State	High Excess Capacity					Low Excess Capacity				
	Total Other School Services Costs	Total Other Current Exp. Costs	Total Construction Costs	Total Teacher Costs	Total Costs	Total Other School Services Costs	Total Other Current Exp. Costs	Total Construction Costs	Total Teacher Costs	Total Costs
Connecticut	$1,546,213	$5,025,040	$71,636,472	$12,603,040	$ 90,810,765	$2,172,902	$7,310,287	$100,671,144	$18,396,080	$128,550,413
Delaware	323,363	1,008,583	15,909,428	2,082,600	19,323,974	417,653	1,335,727	20,548,512	2,750,100	25,051,992
Maine	0	0	0	0	0	---	---	---	---	---
Maryland	---	---	---	---	---	---	---	---	---	---
Massachusetts	0	0	0	0	0	0	0	0	0	0
New Hampshire	0	0	0	0	0					
New Jersey	4,584,838	16,743,887	180,835,598	32,685,750	234,850,073	4,584,838	16,743,887	180,835,598	32,685,750	234,850,073
New York	18,449,318	58,153,815	510,790,900	80,665,200	668,059,233	21,918,961	65,634,867	606,852,012	98,377,400	792,783,240
Pennsylvania	23,497	66,545	1,103,232	147,900	1,341,174	6,073,729	18,679,961	285,177,360	40,959,600	350,890,650
Rhode Island	0	0	0	0	0	408,359	1,225,487	15,168,335	3,258,960	20,061,141
Vermont	---	---	---	---	---	---	---	---	---	---
Illinois	2,637,046	10,200,547	107,624,816	23,862,000	144,324,409	5,396,670	22,160,458	220,252,368	51,604,000	299,413,496
Indiana	196,497	515,829	8,988,042	1,361,711	11,062,079	824,802	2,228,913	37,727,494	5,858,099	46,639,308
Iowa	0	0	0	0	0	0	0	0	0	0
Kansas	325,407	827,677	10,271,010	1,948,100	13,372,194	685,783	1,865,789	21,645,760	4,381,300	28,578,632
Michigan	3,747,565	19,892,555	217,933,268	35,598,552	277,171,940	8,873,660	52,755,827	516,032,552	95,595,490	673,257,529
Minnesota	0	0	0	0	0	1,114,273	3,105,056	36,433,326	6,407,000	47,059,655
Missouri	1,679,546	4,395,578	63,357,056	11,800,100	80,932,280	1,679,546	4,395,518	63,357,056	11,800,100	81,232,280
Nebraska	47,748	154,545	2,036,580	293,514	2,532,387	341,531	1,338,109	14,567,280	2,513,684	18,760,604
North Dakota	---	---	---	---	---	32,107	---	881,100	128,440	1,041,647
Ohio	1,876,125	9,436,958	94,873,600	18,269,100	124,455,783	1,876,125	9,436,958	94,873,600	18,269,100	124,455,183
South Dakota	0	0	0	0	0	---	---	---	---	---
Wisconsin	1,383,124	3,813,452	48,717,900	8,811,000	62,725,476	2,267,945	6,565,704	79,884,000	15,219,000	103,936,649
Alabama	0	0	0	0	0	0	0	0	0	0
Arkansas	0	0	0	0	0	398,106	787,648	7,012,560	1,568,250	9,766,564
Florida	381,485	1,192,999	12,168,420	3,569,000	17,311,904	381,485	1,192,999	12,168,420	3,569,000	17,311,904
Georgia	0	0	0	0	0	569,580	873,819	11,296,584	2,186,850	14,726,833
Kentucky	0	0	0	0	0	718,382	858,952	17,515,784	3,928,320	23,021,438
Louisiana	1,867,785	2,776,605	39,052,048	6,857,190	50,553,628	1,867,885	2,776,605	39,052,048	6,857,190	50,553,728
Mississippi	0	0	0	0	0	0	0	0	0	0
North Carolina	26,561	53,822	718,078	156,324	954,785	107,411	228,535	2,903,862	669,960	3,909,768
South Carolina	0	0	0	0	0	30,028	64,667	583,110	148,500	826,305
Tennessee	255,214	118,101	5,909,436	1,454,400	7,737,151	710,209	1,707,528	16,444,746	4,298,400	23,160,883
Virginia	416,506	213,767	17,826,822	3,232,000	21,689,095	493,019	1,327,711	21,101,626	3,840,000	26,762,356
West Virginia	85,470	193,587	2,373,920	456,600	3,109,577	375,953	840,701	10,442,040	2,153,630	13,812,324

Table X

Cost Estimates for K-12 in Other SMSA Under High and Low Excess Capacity Formulas, by State, 1969 (continued)

State	High Excess Capacity					Low Excess Capacity				
	Total Other School Services Costs	Total Other Current Exp. Costs	Total Construction Costs	Total Teacher Costs	Total Costs	Total Other School Services Costs	Total Other Current Exp. Costs	Total Construction Costs	Total Teacher Costs	Total Costs
Alaska	---	---	---	---	---	---	---	---	---	---
Arizona	0	0	0	0	0	0	0	0	0	0
California	0	0	0	0	0	1,661,895	8,665,667	77,017,082	19,528,065	106,872,709
Colorado	243,996	201,212	5,278,462	1,748,000	7,471,670	588,477	2,046,258	19,551,378	4,377,600	26,563,713
Hawaii	---	---	---	---	---	---	---	---	---	---
Idaho	13,652	187,612	423,645	89,492	714,401	---	---	---	---	---
Montana	---	---	---	---	---	---	---	---	---	---
Nevada	0	0	0	0	0	---	---	---	---	---
New Mexico	74,346	134,084	1,207,310	454,720	1,870,460	---	---	---	---	---
Oklahoma	0	0	0	0	0	55,872	169,101	1,354,240	335,376	1,914,589
Oregon	0	0	0	0	0	828,492	3,117,238	28,500,262	7,673,625	40,119,617
Texas	0	0	0	0	0	0	0	0	0	0
Utah	2,154	7,845	78,516	15,200	103,715	2,154	7,845	78,516	15,200	103,715
Washington	0	0	0	0	0	974,278	3,855,795	41,702,784	7,581,000	54,113,857
Wyoming	---	---	---	---	---	---	---	---	---	---
Washington, D.C.	---	---	---	---	---	---	---	---	---	---

excess capacity" formula five states, would experience zero costs in the absorption of nonpublic Catholic students in their central cities. These states are Alabama, Georgia, Kentucky, Mississippi, and Tennessee. Relatively low costs are found in the remaining southern states--with the exception of Louisiana--and in the sparsely populated states. The highest total costs are in the more industrial states of New York, Pennsylvania, Illinois, Michigan, California and New Jersey. The same trend is found in the "low excess capacity" calculations. Only three states are estimated to have zero costs in absorbing nonpublic Catholic students: Alabama, Mississippi, and Tennessee.[11]

The existence of zero costs of absorption is far more prevalent in the other SMSA State-Subdivision as Table X indicates. Here excess capacity is sufficient to absorb the nonpublic Catholic students in twenty states under the "high excess capacity" calculation and in six states under the "low excess capacity" calculation. The highest costs of absorption falls to essentially the same group of industrial states that experience high costs in their central cities.

The cost associated with absorbing nonpublic Catholic students outside SMSA areas is small compared to the other two classifications. This is primarily due to the concentration of nonpublic Catholic students

Table XI

Cost Estimates for K-12 Outside SMSA's Under High and Low Excess Capacity Formulas, by State, 1969

	HIGH EXCESS CAPACITY					LOW EXCESS CAPACITY				
State	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs
Conn.	$ 0	$ 0	$ 0	$ 0	$ 0	$ 300,787	$ 952,437	$ 13,935,576	$ 2,469,760	$ 17,658,560
Del.	53,060	174,938	2,610,534	311,500	3,150,032	---	---	---	---	---
Maine	0	0	0	0	0	0	0	0	0	0
Md.	---	---	---	---	---	---	---	---	---	---
Mass.	0	0	0	0	0	0	0	0	0	0
N.H.	0	0	0	0	0	0	0	0	0	0
N.J.	2,683,886	9,894,462	106,047,630	18,961,750	137,587,728	2,683,886	9,894,462	106,047,630	18,961,750	137,587,748
N.Y.	5,524,370	17,413,282	152,948,628	24,579,800	200,466,080	5,949,102	18,939,525	164,707,824	26,704,100	216,300,551
Pa.	2,802,214	8,528,774	131,571,232	17,139,000	160,041,220	3,772,721	11,844,863	177,139,040	23,846,700	216,603,324
R.I.	---	---	---	---	---	---	---	---	---	---
Vermont	---	---	---	---	---	---	---	---	---	---
Ill.	1,336,354	5,267,889	54,540,128	12,144,400	73,288,771	3,470,108	15,246,540	141,624,256	35,017,000	195,357,904
Ind.	0	0	0	0	0	0	0	0	0	0
Iowa	2,133,251	6,274,957	56,192,620	13,947,824	78,548,652	3,747,700	11,795,445	98,719,320	26,111,624	140,374,089
Kansas	122,994	309,380	3,882,120	754,600	5,069,094	1,381,650	3,759,017	43,609,840	9,201,500	57,952,007
Mich.	1,514,765	8,040,565	88,088,560	14,901,491	112,545,381	2,327,085	12,970,145	135,327,633	24,194,049	174,818,912
Minn.	2,531,408	7,125,145	82,769,294	15,875,600	108,301,447	1,002,516	2,652,412	32,779,192	5,934,000	42,368,120
Mo.	1,127,812	2,915,843	42,544,152	8,560,550	55,148,357	1,943,977	5,282,362	73,332,112	15,516,975	96,075,426
Nebr.	222,737	746,878	9,500,400	1,873,974	12,343,989	222,737	746,878	9,500,400	1,873,974	12,343,989
N.D.	404,617	766,782	11,103,840	1,561,560	13,836,799	718,903	1,403,230	19,728,720	2,866,240	24,717,093
Ohio	805,175	4,109,852	40,716,800	7,552,500	53,184,327	805,175	4,109,852	40,716,800	755,250	46,387,077
S.D.	353,514	969,062	14,721,000	1,927,800	16,043,576	731,588	2,125,711	30,464,700	4,208,400	37,530,399
Wisc.	4,316,011	11,899,797	152,023,200	27,486,000	195,725,008	4,635,872	12,909,217	163,289,700	29,907,000	210,741,789
Ala.	0	0	0	0	0	25,174	34,405	551,460	109,072	720,111
Ark.	0	0	0	0	0	1,286,782	2,522,099	22,666,380	4,573,017	31,048,278
Fla.	0	0	0	0	0	0	0	0	0	0
Ga.	0	0	0	0	0	1,063,758	2,589,815	32,514,858	6,266,580	42,435,011
Ky.	0	0	0	0	0	856,092	1,400,016	20,873,468	4,902,960	28,032,536
La.	1,121,071	1,583,175	23,438,348	4,096,140	30,238,734	3,886,681	6,008,560	81,259,196	15,531,780	106,686,217
Miss.	0	0	0	0	0	0	0	0	0	0

Table XI

Cost Estimates for K-12 Outside SMSA's, Under High and Low Excess Capacity Formulas, by State, 1969 (con't.)

	HIGH EXCESS CAPACITY					LOW EXCESS CAPACITY				
State	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs	Total Other School Ser. Costs	Total Other Current Exp. Costs	Total Construct. Costs	Total Teacher Costs	Total Costs
N.C.	$ 124,122	$ 251,515	$ 3,355,658	$ 751,844	$ 4,483,139	$ 452,796	$ 972,619	$ 12,241,400	$ 2,925,492	$ 16,592,307
S.C.	0	0	0	0	0	189,806	408,760	3,685,869	945,000	5,229,435
Tenn.	0	0	0	0	0	0	0	0	0	0
Va.	0	0	0	0	0	197,104	536,152	8,436,220	1,552,000	10,721,476
W. Va.	0	0	0	0	0	0	0	0	0	0
Alaska	---	---	---	---	---	--	---	---	---	---
Ariz.	0	0	0	0	0	0	0	0	0	0
Calif.	1,060,981	5,588,917	49,168,984	12,612,510	68,431,392	1,109,153	5,842,671	---	13,242,120	---
Colo.	108,315	358,540	3,598,630	866,400	4,931,885	711,731	2,617,651	23,646,322	6,323,200	33,298,904
Hawaii	---	---	---	---	---	---	---	---	---	---
Idaho	0	0	0	0	0	0	0	0	0	0
Mont.	26,647	69,737	686,280	130,050	912,714	363,206	1,474,375	13,663,356	2,761,650	18,262,587
Nev.	---	---	---	---	---	---	---	---	---	---
N.M.	7,997	18,629	129,870	47,040	203,536	0	0	0	0	0
Okla.	64,995	196,712	1,575,362	419,220	2,256,289	799,450	2,564,833	19,377,270	5,442,873	28,184,426
Ore.	256,001	908,716	8,806,476	2,216,825	12,188,018	920,874	4,307,131	37,946,482	10,222,525	53,398,012
Texas	642,185	1,954,453	19,881,782	5,310,750	27,789,170	3,512,578	12,080,101	108,747,954	32,832,075	157,172,708
Utah	7,419	27,022	270,444	53,200	358,085	---	---	---	---	---
Wash.	238,973	872,979	10,228,948	1,732,800	13,073,700	435,394	1,689,915	18,636,516	3,321,200	24,083,025
Wyo.	---	---	---	---	---	---	---	---	---	---
Wash., D.C.	---	---	---	---	---	---	---	---	---	---

in urban and suburban areas. However, these costs can be substantial for certain states. For example, in Minnesota, Iowa, and Oregon, the total costs of absorbing Catholic students is greater outside SMSA regions than it is for the central city or other SMSA regions. In absolute dollars, however, the industrial states still must bear the greatest burden in absorbing nonpublic students. One obvious exception is noted in Table XI. This is for the state of Louisiana. Here the absorption of the large number of Catholics in rural schools would cause substantial costs. There are estimated to be \$30,348,734 under the "high excess capacity" formula and \$106,686,217 under the "low excess capacity" formula.[12]

The principal value of the State-subdivision analysis is the comparison of average marginal costs with average current expenditure per pupil. These comparisons, which are found in Tables XII and XIII, indicate the variation in marginal costs within each state. These variations in costs are extremely important from a policy point of view, since they indicate how the costs will be distributed within each state.

The average marginal cost calculations under the "high excess capacity" formula yield costs which are invariably lower than the average current expenditure per pupil. In several states the average marginal cost in certain state-subdivisions approaches the state average. For

Table XII

Comparison of Marginal Costs With Average Current Expenditures Per Pupil
State-Subdivision Analysis, Under the High Excess Capacity Formula

State	Central Cities Nonpublic Students	Central Cities Total Current Expenditures	Central Cities Marginal Costs	Other SMSA Nonpublic Students	Other SMSA Total Current Expenditures	Other SMSA Marginal Costs	Outside SMSA Nonpublic Students	Outside SMSA Total Current Expenditures	Outside SMSA Marginal Costs
Connecticut	40,390	7,671,244	190	34,039	19,174,293	563	10,352	0	0
Delaware									
Maine	6,491	3,343,624	515	476	0	0	6,781	0	0
Maryland	--	--	--	--	--	--	--	--	--
Massachusetts	112,189	34,934,371	311	51,851	0	0	25,830	0	0
New Hampshire	8,263	--	--	829	0	0	15,674	0	0
New Jersey	94,733	61,111,427	645	127,469	54,014,475	424	60,497	31,540,098	521
New York	434,889	352,970,820	812	193,775	157,268,333	812	58,023	47,517,452	819
Pennsylvania	245,703	95,891,577	390	163,829	237,942	1	76,044	28,469,988	374
Rhode Island	20,549	3,905,273	190	11,506	0	0	5,211	--	--
Vermont	4,549	--	--	--	--	--	--	—	--
Wash., D. C.	--	--	--	--	--	--	--	--	--
Illinois	243,296	130,560,715	537	126,621	36,699,593	290	48,228	18,748,643	389
Indiana	55,449	16,757,487	302	21,517	2,074,037	96	23,272	0	0
Iowa	33,777	19,591,091	580	1,177	0	0	34,474	22,356,032	648
Kansas	17,790	2,792,761	157	6,811	3,101,184	455	8,612	1,186,974	138
Michigan	98,386	50,047,901	509	96,388	59,238,672	615	38,690	24,456,821	632
Minnesota	43,382	19,440,782	448	22,014	0	0	40,613	25,532,153	629
Missouri	53,342	5,120,161	96	39,789	17,575,224	442	30,945	12,604,205	407
Nebraska	23,895	9,343,841	391	4,431	495,807	112	15,962	2,843,589	181
North Dakota	5,513	2,669,986	484	535	--	--	5,608	2,732,959	487
Ohio	150,163	36,352,623	242	129,064	29,582,183	229	49,384	12,467,527	252
South Dakota	4,937	1,822,695	369	--	0	0	7,010	1,322,576	189
Wisconsin	73,779	35,372,543	479	23,199	14,007,576	604	72,392	43,701,808	604
Alabama	11,799	0	0	3,265	0	0	1,984	0	0
Arkansas	6,031	884,611	147	684	0	0	2,082	0	0
Florida	40,887	7,526,279	184	24,773	5,143,484	208	7,586	0	0

Table XII

Comparison of Marginal Costs With Average Current Expenditures Per Pupil
State-Subdivision Analysis, Under the High Excess Capacity Formula (continued)

	Central Cities			Other SMSA			Outside SMSA		
State	Nonpublic Students	Total Current Expenditures	Marginal Costs	Nonpublic Students	Total Current Expenditures	Marginal Costs	Nonpublic Students	Total Current Expenditures	Marginal Costs
Georgia	7,270	0	0	5,346	0	0	661	0	0
Kentucky	27,292	0	0	24,469	0	0	13,760	0	0
Louisiana	51,495	18,321,059	356	24,136	11,501,580	477	34,902	6,800,386	195
Mississippi	4,048	0	0	840	0	0	6,170	0	0
North Carolina	6,605	2,928,080	443	569	216,70[illegible]	381	2,659	1,127,481	424
South Carolina	3,994	1,662,523	416	1,330	0	0	2,037	0	0
Tennessee	10,247	0	0	5,382	1,827,715	340	2,052	0	0
Virginia	11,301	406,992	36	14,977	3,862,273	258	2,783	0	0
West Virginia	7,466	236,847	32	1,480	735,657	497	3,964	0	0
Alaska	--	--	--	--	--	--	--	--	--
Arizona	15,023	4,050,158	270	531	0	0	4,145	0	0
California	169,358	75,388,129	445	104,625	0	0	36,124	19,262,408	533
Colorado	19,743	4,196,109	213	5,733	2,193,208	383	3,835	1,333,255	348
Hawaii	7,967	1,989,144	250	2,057	--	--	4,563	--	--
Idaho	2,486	1,087,269	437	305	144,340	473	2,674	0	0
Montana	5,351	2,752,376	514	563	--	--	4,230	226,434	54
Nevada	--	--	--	--	--	--	--	--	--
New Mexico	6,126	1,454,215	237	1,255	663,150	528	2,639	73,666	28
Oklahoma	6,817	1,469,129	216	791	0	0	1,489	680,927	457
Oregon	11,487	4,763,660	415	5,687	0	0	5,286	3,381,542	640
Texas	72,227	29,252,978	405	431	0	0	17,657	7,907,388	448
Utah	3,172	1,438,559	454	675	25,199	37	186	87,641	471
Washington	22,558	9,755,102	432	9,297	0	0	5,215	2,844,752	545
Wyoming	377	--	--	--	--	--	--	--	--

example, the central city costs in Illinois are estimated to be $537, while the Illinois public school costs are $762, the other SMSA estimated average marginal costs in Wisconsin are $604, compared to the current average costs of $833, and the Outside SMSA costs estimated for Oregon of $640, approaches the $838 average current expenditure per pupil.

The average marginal costs of central city SMSA are generally higher than the remaining two state-subdivisions. These high costs coupled with the concentration of nonpublic Catholic students in urban areas, generates financial problems which are unique to the urban areas. Even those states with relatively few nonpublic students are confronted with this financial problem. It is generally believed that nonpublic school closings in the soutnern states of Arkansas, South Carolina and Florida and the sparsely populated states of Arizona, Montana and Idaho would have little financial impact. However, the urban areas--and to a lesser extent, the suburban areas--in these states would be subject to cost increases.

The "low excess capacity" calculations found in Table XIII indicate the same general pattern as the "high excess capacity" estimates. Marginal costs are consistently higher under this formula than they are under the "high excess capacity" formula. Indeed, marginal costs are

Table XIII

Comparison of Marginal Costs With Average Current Expenditures Per Pupil
State-Subdivision Analysis, Under the Low Excess Capacity Formula

State	Central Cities			Other SMSA			Outside SMSA			Average Current Expenditures Per Pupil
	Nonpublic Students	Total Current Expenditures	Marginal Costs	Nonpublic Students	Total Current Expenditures	Marginal Costs	Nonpublic Students	Total Current Expenditures	Marginal Costs	
Connecticut	40,390	13,227,267	327	34,039	27,879,269	819	10,352	3,722,984	360	820
Delaware										745
Maine	6,491	4,358,929	672	476	--	--	6,781	0	0	647
Maryland	--	--	--	--	--	--	--	--	--	--
Massachusetts	112,189	34,934,371	311	51,851	0	0	25,830	0	0	705
New Hampshire	8,263	3,905,273	473	829	--	--	15,674	0	0	652
New Jersey	94,773	65,355,291	690	127,469	54,014,475	424	60.497	31,540,118	521	897
New York	434,889	496,147,390	1,141	193,775	185,931,228	960	58,023	51,592,727	889	1,151
Pennsylvania	245,703	154,105,928	627	163,829	65,713,290	401	76,044	39,464,284	519	825
Rhode Island	20,549	17,833,258	868	11,506	4,892,606	425	5,211	--	--	838
Vermont	--	--	--	--	--	--	--	--	--	--
Wash. D. C.	--	--	--	--						
Illinois	243,296	147,947,595	608	126,621	79,161,128	625	48,222	53,733,648	1,114	762
Indiana	55,449	33,568,104	605	21,517	8,911,814	414	23,272	0	0	(624 Ave. Attend)
Iowa	33,777	26,273,139	778	1,177	0	0	34,474	41,654,769	1,208	855
Kansas	17,790	9,535,236	536	6,811	6,932,872	1,018	8,612	14,342,167	1,665	(721 Ave. Attend.)
Michigan	98,386	79,592,971	809	96,388	157,224,977	1,631	38,690	39,491,279	1,021	(824 Ave. Attend.)
Minnesota	43,382	25,554,230	589	22,014	10,626,329	483	40,613	9,588,928	236	841
Missouri	53,342	5,120,161	96	39,789	17,875,224	449	30,945	22,743,314	735	(714 Ave. Attend.)
Nebraska	23,895	10,583,971	443	4,431	4,193,324	946	15,692	2,843,589	181	508
North Dakota	5,513	2,669,986	484	535	160,547	300	5,608	4,988,373	890	598
Ohio	150,163	36,352,623	242	129,064	29,582,183	229	49,384	13,272,702	269	637
South Dakota	4,937	1,822,695	369	--	--	--	7,010	7,065,699	1,007	627
Wisconsin	73,779	36,772,905	498	23,199	24,052,649	1,037	72,392	47,452,089	655	833
Alabama	11,799	0	0	3,265	0	0	1,984	168,651	85	419
Arkansas	6,031	1,899,273	315	684	2,754,004	4,026	2,082	8,381,898	4,026	507
Florida	40,887	20,074,555	491	24,773	5,143,484	208	1,586	0	0	665

Table XIII

Comparison of Marginal Costs With Average Current Expenditures Per Pupil
State-Subdivision Analysis, Under the Low Excess Capacity Formula (continued)

State	Central Cities			Other SMSA			Outside SMSA			Average Current Expenditures Per Pupil
	Nonpublic Students	Total Current Expenditures	Marginal Costs	Nonpublic Students	Total Current Expenditures	Marginal Costs	Nonpublic Students	Total Current Expenditures	Marginal Costs	
Georgia	7,270	4,101,495	564	5,346	3,430,249	642	661	9,920,153	15,007	557
Kentucky	27,292	10,261,380	376	24,469	5,505,654	225	13,760	7,159,068	520	576
Louisiana	51,495	19,923,399	387	24,136	11,501,680	477	34,902	25,427,021	729	575
Mississippi	4,048	0	0	840	0	0	6,170	0	0	449
North Carolina	6,605	3,589,218	543	569	1,005,906	1,768	2,659	4,350,907	1,636	575
South Carolin	3,994	1,816,565	455	1,330	243,195	183	2,037	1,543,566	758	522
Tennessee	10,247	0	0	5,382	6,716,137	1,248	2,052	0	0	533
Virginia	11,301	4,677,199	414	14,977	5,660,730	378	2,783	2,285,256	821	653
West Virginia	7,466	940,491	126	1,480	3,370,284	2,277	3,464	0	0	593
Alaska	--	--	--	--	--	--	--	--	--	--
Arizona	15,023	4,050,158	270	531	0	0	4,145	0	0	719
California	169,358	118,029,264	697	104,625	29,855,627	285	36,124	20,193,994	559	911
Colorado	19,743	8,563,075	434	5,733	7,012,335	1,223	3,835	9,652,582	2,517	653
Hawaii	7,967	5,329,645	669	2,057	--	--	4,563	--	--	799
Idaho	2,486	1,639,560	660	305	--	--	2,674	0	0	(629 Ave. Attend.)
Montana	5,351	2,752,376	514	563	--	--	4,230	4,599,231	1,087	778
Nevada	--	--	--	--	--	--	--	--	--	--
New Mexico	6,126	1,454,215	237	1,255	--	--	2,639	0	0	696
Oklahoma	6,817	1,469,129	216	791	560,349	708	1,489	8,807,156	5,915	517
Oregon	11,487	4,763,660	415	5,687	11,619,355	2,043	5,286	15,451,530	2,923	838
Texas	72,227	79,021,118	1,094	431	0	0	17,657	48,424,754	2,743	543
Utah	3,172	3,923,899	1,237	675	25,199	37	186	--	--	575
Washington	22,558	21,699,734	962	9,287	12,411,073	1,336	5,215	5,446,509	1,044	(743 Ave. Attend.)
Wyoming	--	--	--	--	--	--	--	--	--	--

greater than average current expenditure per capita for the central cities of 3 states, the other SMSA areas of 12 states, and the outside SMSA areas in 18 states.[13]

It is most important to note that under both capacity estimates, marginal costs are generally higher for the central cities than they are for the other SMSA areas--which is in some sense a proxy for suburban areas. This is somewhat surprising in light of the current discussion concerning the high costs of education in suburbia. However, two factors are often overlooked. First, the demand for Catholic education in suburban areas has fallen relative to the demand for Catholic education in urban areas.[14] Thus, a larger percentage of Catholics have already entered the public school system in suburban areas compared to urban areas. Second, pupil/teacher ratios have fallen faster in suburban areas relative to urban areas. This is in part due to the greater fiscal capacity of suburban areas. The net result is a greater potential capacity and fewer nonpublic students in suburban areas compared to urban areas.

IV. CONCLUSION

The State-by-State analysis has indicated that the costs of absorbing nonpublic students are quite substantial, but generally limited to industrial states. Indeed, seven states--New York, Pennsylvania, New Jersey, Illinois, California, Ohio, and Michigan account for approximately 65 percent of all the costs in the United States. Few if any southern or sparsely populated states will incur significant costs if all nonpublic schools are closed. There are three reasons for high costs in industrial states. Nonpublic students are concentrated in these areas. Public school costs are high in these areas and public school enrollments have not fallen as much in these areas as they have in other parts of the country.

The analysis has yielded a high and a low cost estimate. If public school officials allow pupil/teacher ratios to revert to the highest level they have experienced since 1965, the total current costs of absorbing all nonpublic students in 1970 would be $1,348,655,147. If a more cautious position in regard to pupil/teacher ratios is taken, the total current costs could reach $3,176,371,885. In addition, there is a potential--although unlikely--capital expenditures of $4,673,224,567 and $9,896,300,446, if new school facilities were to be constructed.

The State-Subdivision analysis reaffirmed the assertion that a relatively few industrial states share a disproportionate portion of the total U.S. costs of absorbing nonpublic students. In addition, the analysis indicated that the central city SMSA category experience higher costs than the other two population categories. Even in many states that are generally believed to be immune from nonpublic school closing, positive costs have been predicted. Thus, high average marginal costs, coupled with large concentrations of nonpublic students, paints a gray picture for the already financially plagued urban areas.

FOOTNOTES

1. For example, if the Froomkin data were used, the percentage of school-age children in central cities would be the same for Illinois as it would for South Dakota.

2. A description of the technique used to estimate the percentage distributions of school-age children by state in each of the three regions is found in Appendix D - "Estimation of School Age Population by State in Central City SMSA, Other SMSA, and Outside SMSA."

3. The 1969 prepublication data were classified by the SMSA characteristics of the individual school districts. Unfortunately this classification was not done for the 1967 and 1968 data. Each school district was separately identified by its SMSA category before pupil/teacher ratios for the three regions were calculated.

4. The basic cause of the obvious inconsistency in the pupil/teacher ratios appear to be in the classification of pupils and teachers into elementary and secondary levels. The NCES data were not controlled for this variation. Thus a large percentage of the school districts in the 1967 sample could have classified elementary as K-6, while the sample schools in 1968, may have predominantly classified elementary as K-7 or K-8. In addition, the mix of K-6, K-7, and K-8 in any one year makes the pupil/teacher ratios by elementary and secondary levels meaningless. Thus little confidence can be placed in the pupil/teacher ratio by level published in the Statistics of Local Public School Systems.

5. One obvious exception to this generalization is the State of California. Even though 301,326 nonpublic students must be absorbed, the rapidly declining pupil/teacher ratios generate sufficient excess capacity. In this case the P/T_H of 29.50 times the T_{1970} of 112,000, generates an elementary capacity of 3,304,000 which is more than adequate to absorb fully the nonpublic students.

6. Note that construction costs as a percentage of total costs averages more than 80.0 percent under the three cost calculations.

7. These costs are calculated by summing the total current operating costs associated with absorbing nonpublic students and dividing this sum by the total number of nonpublic students entering the system. Note that this is an average marginal cost estimate. In essence it assumes that the marginal costs are linear. In addition the average marginal cost is not perfectly comparable to "Annual Current Expenditure per pupil in average daily membership." This latter figure is total current expenditures divided by students in "average daily attendance." This represents fewer students than the fall enrollment figure, thus the use of ADA somewhat--but not significantly--inflates the per-pupil expenditures.

8. It should be noted that the multiplication of average current expenditure per-pupil times the number of nonpublic students, makes two very severe assumptions. First, it assumes away any possible excess capacity in the system. Thus even in those states where public school enrollments have fallen, no excess capacity is recognized. Needless to say, the potential excess capacity associated with adjusting pupil/teacher ratios is not considered. Secondly, all per-pupil costs are assumed to be fully variable. That is, the analysis assumes away any possible cost savings that may be achieved through economies of scale.

9. See Appendix D for a full discussion of data limitations.

10. If the nonpublic non-Catholic enrollments were available on a state-subdivision basis the per-pupil costs could be readily calculated. In those states with a positive cost associated with absorbing the nonpublic Catholic students, the per-pupil costs under the high excess capacity formula would equal: the average teacher salary divided by the historical high pupil/teacher ratio (P/T_H) plus the weighted other current expenditure per pupil, plus other school services per pupil. This marginal cost would be greater than the cost calculated in Table X, since all the excess capacity has been consumed by the absorption of the Catholic students. If a state has zero marginal costs associated with the absorption of Catholic nonpublic students, the basic formula would still be employed, however, the nonpublic non-Catholic enrollment first would be subtracted from any remaining excess capacity in the region.

11. It should be noted that the State-Subdivision Analysis was not conducted for all states. The states of Maryland, Vermont, Alaska, and Wyoming, plus the District of Columbia were not reanalyzed since this would simply duplicate the State-by-State analysis. In addition, missing pupil/teacher ratios by SMSA classifications resulted in the inability to estimate costs in a few state subdivisions.

12. The total costs and the total current costs for each subdivision within the states can not be added to obtain the total for all states by the three subdivisions. This sum would not be an accurate reflection of costs, since some states have not been analyzed. See: Footnote No. 11.

13. Extraordinary costs have been calculated for a number of states particularly in the outside SMSA area. This is the result of pupil/teacher ratios increasing substantially from 1968 to 1969. These increases in pupil/teacher ratios indicate an over-utilization of capacity under the "low excess capacity" assumptions. The costs of eliminating this over-utilization of capacity is added to the costs of absorbing nonpublic students, thus causing a very high marginal cost.

The large number of increases in pupil/teacher ratios for the outside SMSA area may be due to atypical schools in the sample of school districts used by the NCES. The total number of school districts in the outside SMSA regions are relatively few in comparison to the central city and other SMSA areas. Thus in small states, where the total sample is small, one atypical pupil/teacher ratio can substantially alter the average pupil/teacher ratio computed for that state subdivision. Thus less confidence can be placed in the marginal cost estimates for the outside SMSA areas in small states than can be placed in the marginal cost estimate of the central cities of these small states. In comparisons between states, less confidence can be placed on the cost estimate of small states than can be placed on the estimates of large states.

14. See: Report entitled "Enrollment in Nonpublic Schools" for a full discussion of this phenomenon.

VI. FINANCIAL PROJECTIONS FOR DIOCESAN SCHOOL SYSTEMS: SELECTED CASE STUDIES

Ernest J. Bartell, C.S.C.

FINANCIAL PROJECTIONS FOR DIOCESAN SCHOOL SYSTEMS: SELECTED CASE STUDIES

For more complete understanding of the relative costs of education in public and nonpublic schools in the cities chosen for case study, financial projections to 1975 and 1980 have been prepared for the Roman Catholic diocesan elementary and secondary school systems of Miami, Florida, Providence, Rhode Island, St. Louis, Missouri, San Francisco, California, and New Orleans, Louisiana. These locations were chosen for the diversity they offered in one or more of the following characteristics: geography, size of Catholic school system, projected decline or growth in enrollment, and cost factors such as the supply of religious teachers, pupil-teacher ratios, and regional price levels. The financial projections were based upon the "hard times" assumptions of relatively slow growth in revenues and relatively high rates of inflation in costs as explained in the body of the report for the nation, and the case study results are summarized in Tables 1 through 5 here.

The present size of the five diocesan school systems ranges from just over 33,000 in Providence to over 88,000 elementary and secondary school pupils in the diocesan school system of St. Louis.[1] However, the projected changes in enrollment to 1980 range from an estimated decline of 66% in the Providence school system, which is greater than the national average, to a projected increase of 16% in the Catholic school system of Miami, one of the few areas in the entire nation where population growth can be expected to more than offset declining trends in Catholic school enrollment. At present, there is still evidence of the relative uniformity in operating costs that historically characterize Catholic schools, especially at the elementary level. The range in operating costs per pupil at the elementary level among the four systems extends only from $205 in Providence to $259 in the relatively large urban system of St. Louis, with two of the systems above and three below the national average ($238 budgeted, 1970-71) in operating cost per pupil.

The elementary school operating cost per pupil in the two systems closest in size, Providence and Miami, are below the national average and differ by only $9 per pupil at both the elementary and secondary levels, while total operating deficits at both levels differ by less than 5% between the two systems. This uniformity exists in spite of a substantial difference in the numbers of religious teachers in the two areas. The relatively new and growing Catholic school system in Miami understandably has only approximately half as many religious teachers per pupil as the older and declining school system of Providence. This cost disadvantage in Miami, however, is plainly offset by higher pupil-teacher ratios at both educational levels and by lower average lay teacher salaries, which are only approximately two-thirds as high at the elementary level and three-quarters as high at the secondary level as those in Providence. The two larger urbanized areas, St. Louis and San Francisco, not surprisingly have the highest current operating costs, both above the national average, under the influence not only of high teacher salary costs, but of relatively high non-instructional costs as well.

---

[1] Although the Archdiocese of Providence extends to the entire state of Rhode Island, the data here refer to the Catholic school system of the City of Providence.

Prospects for maintaining the present complement of schools, however, differ greatly among the five systems. With a projected disappearance of approximately two-thirds of present enrollment levels by 1980, Providence is the least likely to maintain its present complement of schools. Overall pupil-teacher ratios would fall by 1980 to below 8-1 in elementary schools and below 11-1 in secondary schools, which would be somewhat less drastically affected by enrollment declines. Nevertheless, with less than one religious teacher for each 70 elementary and each 28 secondary pupils, operating costs per pupil would rise to over $2000 per pupil at both levels if all the schools were kept open, and the total operating deficit would require a subsidy equal to almost three times the estimated total Church operating revenues. (Table 2).

In Miami, on the other hand, maintenance of the existing complement of schools would result in crowding of secondary schools and relatively low decline in elementary enrollments, so that per pupil operating costs would average only about $800 at both levels, 60-65% below the estimates for Providence, if all the schools were kept open.[2] Nevertheless, subsidy of the total operating deficit in Miami would still absorb over 200% of estimated total Church revenues, and would rise to 300% of Church revenues if the secondary system expanded to maintain present pupil-teacher ratios. Moreover, the current relative shortage of religious teachers in Miami, if compounded by projected declines in the availability of religious teachers would result in not more than one religious teacher for every 200 elementary school pupils and one for every 100 secondary pupils by 1975, with a total supply approaching the vanishing point by 1980.

From the point of view of the public sector, however, the required subsidy per pupil (on the assumption that the churchs would continue to contribute the same relative share of Church revenues to school subsidy as in 1970) might well be economically justifiable with less than $400 per pupil required in Miami. In Providence, however, the required subsidy of over $1600 per pupil might not be a rational expenditure in comparison with the alternative of public education. If, however, Church administrators could succeed in closing and consolidating schools in response to declining enrollments, the required subsidy could fall to approximately $500 with partial consolidation, as defined in the national report on cost projections, and to as low as $118 per pupil, if present pupil-teacher ratios could be maintained in the truncated school system.

---

[2] With a projected increase in secondary enrollments, the "zero consolidation" policy estimates of Table 1 become the "zero expansion" policy alternatives and hence, because of the implied crowding and rising pupil-teacher ratios, become the low cost projections, while the "full consolidation" estimates become the "full expansion" estimates with retention of present pupil-teacher ratios, and hence become the high cost projections.

The school systems of San Francisco, St. Louis, and New Orleans, although not facing enrollment declines as severe as those in Providence, begin with a higher cost structure, and hence face equally unsupportable deficits if no attempt is made to curtail the existing complement of schools in response to enrollment declines. Despite the higher projected operating costs per pupil in St. Louis if the entire system of schools should be maintained, the total deficit is expected to grow less rapidly in St. Louis and San Francisco than in New Orleans (Tables 3, 4, and 5).

Although the relative ability of individual school systems to maintain their present numbers of schools varies greatly, similar policies of partial consolidation halfway to perfect consolidation levels would result in needs for external aid that are related to one another in somewhat the same pattern as their relative cost structures. With partial consolidation, Miami, Providence, and New Orleans would require amounts of aid per pupil in 1975 that are only $1 apart and within $2 of the national average of $303 per pupil

(Tables 1,2). By 1980, however, the favorable enrollment position of Miami reduces its aid requirements per pupil 20% below the national average. New Orleans, in a somewhat less advantageous position than Miami, would be 10% below the average aid requirement. Providence Catholic schools, on the other hand, would remain close to the national average, requiring aid per pupil within $6 of the national average of $495 if administrators in the face of declining enrollments succeed in partial consolidation of school operations, as defined in the national report. With perfect consolidation, the aid requirements in Providence would fall below the national average, because of the projected decline in enrollments relatively greater than the estimated decline in the numbers of low cost religious teachers. St. Louis and San Francisco, on the other hand, with their higher cost structures would both require aid per pupil roughly one-third greater than the national average in both 1975 and 1980 under the assumptions of partial consolidation (Tables 3, 4).

The potential ability of the dioceses to consolidate operations to a degree necessary to maintain a certain financial uniformity, at least with respect to external aid requirements, suggests that survival of individual Catholic school systems will depend heavily upon priorities of decision makers in each situation. Even if sufficient external aid should be forthcoming to stabilize the financial burden of the individual systems, it is not clear that the Providence and St. Louis Catholic school systems, if allowed to decline 66% and 55% in enrollment respectively as predicted, would be considered as qualitatively desirable and worth the effort of consolidation by local Churches as the systems in San Francisco, with a projected enrollment decline of 40%, New Orleans with a 28% decline, and Miami with a projected increase of 16%. In the absence of deliberate national organization, the all-or-nothing decisions to close individual Catholic school systems are likely to vary with the goals, priorities and determination of local ecclesiastical decision makers.

TABLE 1

PROJECTIONS OF CATHOLIC SCHOOL COSTS AND REVENUES--DIOCESE OF MIAMI

	1970	1975			1980		
		Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation	Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation
ELEMENTARY							
Enrollment	28,502	27,400	27,400	27,400	26,400	26,400	26,400
Ratio of Pupils to Religious Teachers	94.4	199.0	199.0	199.0	480.0	480.0	480.0
Operating Costs Per Pupil	$ 214	$ 551	$ 563	$ 575	$ 750	$ 777	$ 805
Total Operating Deficit	$3.3 million	$11.5 million	$11.8 million	$12.2 million	$15.2 million	$15.9 million	$16.6 million
SECONDARY							
Enrollment	9,057	12,400	12,400	12,400	17,000	17,000	17,000
Ratio of Pupils to Religious Teachers	47.0	99.2	99.2	99.2	246.0	246.0	246.0
Operating Costs Per Pupil	$ 487	$ 1,052	$ 871	$ 739	$ 1,452	$ 1,034	$ 802
Total Operating Deficit	$.98 million	$6.8 million	$4.5 million	$2.9 million	$13.2 million	$6.1 million	$2.1 million
Percentage of Ordinary Church Revenues Required for Elementary and Secondary School Subsidy	49	169	183	205	204	239	309
External Aid Required Per Pupil - Elementary and Secondary	--	$ 268	$ 301	$ 349	$ 326	$ 401	$ 549

TABLE 2

PROJECTIONS OF CATHOLIC SCHOOL COSTS AND REVENUES--DIOCESE OF PROVIDENCE

	1970	1975			1980		
		Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation	Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation
ELEMENTARY							
Enrollment	26,310	13,300	13,300	13,300	6,700	6,700	6,700
Ratio of Pupils to Religious Teachers	47.3	53.0	53.0	53.0	70.5	70.5	70.5
Operating Costs Per Pupil	$ 205	$ 418	$ 612	$ 995	$ 582	$ 1,003	$ 2,574
Total Operating Deficit	$3.3 million	$4.1 million	$6.7 million	$11.8 million	$2.9 million	$5.8 million	$16.3 million
SECONDARY							
Enrollment	7,416	5,890	5,890	5,890	4,700	4,700	4,700
Ratio of Pupils to Religious Teachers	28.2	31.9	31.9	31.9	42.8	42.8	42.8
Operating Costs Per Pupil	$ 478	$ 901	$ 1,048	$ 1,232	$ 1,236	$ 1,566	$ 2,077
Total Operating Deficit	$ .81 million	$2.4 million	$3.3 million	$4.3 million	$2.7 million	$4.3 million	$6.7 million
Percentage of Ordinary Church Revenues Required for Elementary and Secondary School Subsidy	51	79	121	196	66	118	270
External Aid Required Per Pupil - Elementary and Secondary	--	$ 123	$ 302	$ 624	$ 118	$ 501	$ 1,635

TABLE 3

PROJECTIONS OF CATHOLIC SCHOOL COSTS AND REVENUES--ARCHDIOCESE OF ST. LOUIS

	1970	1975			1980		
		Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation	Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation
ELEMENTARY							
Enrollment	66,328	41,500	41,500	41,500	26,000	26,000	26,000
Ratio of Pupils to Religious Teachers	67.9	88.9	88.9	88.9	133.0	133.0	133.0
Operating Costs Per Pupil	$ 259	$ 571	$ 731	$ 988	$ 790	$ 1,153	$ 2,040
Total Operating Deficit	$14.0 million	$21.0 million	$27.7 million	$38.4 million	$18.3 million	$27.8 million	$50.9 million
SECONDARY							
Enrollment	21,836	17,350	17,350	17,350	13,750	13,750	13,750
Ratio of Pupils to Religious Teachers	30.1	39.4	39.4	39.4	59.3	59.3	59.3
Operating Costs Per Pupil	$ 546	$ 1,116	$ 1,279	$ 1,484	$ 1,557	$ 1,929	$ 2,503
Total Operating Deficit	$5.1 million	$12.1 million	$14.9 million	$18.5 million	$13.7 million	$18.8 million	$26.7 million
Percentage of Ordinary Church Revenues Required for Elementary and Secondary School Subsidy	65	111	142	190	104	151	251
External Aid Required Per Pupil - Elementary and Secondary	--	$ 232	$ 393	$ 635	$ 301	$ 667	$ 1,446

TABLE 4

PROJECTIONS OF CATHOLIC SCHOOL COSTS AND REVENUES--ARCHDIOCESE OF SAN FRANCISCO

	1970	1975			1980		
		Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation	Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation
ELEMENTARY							
Enrollment	37,574	26,750	26,750	26,750	19,050	19,050	19,050
Ratio of Pupils to Religious Teachers	62.5	91.3	91.3	91.3	153.6	153.6	153.6
Operating Costs Per Pupil	$ 239	$ 562	$ 680	$ 846	$ 803	$ 1,078	$ 1,606
Total Operating Deficit	$3.60 million	$9.92 million	$13.08 million	$17.51 million	$10.4 million	$15.7 million	$25.7 million
SECONDARY							
Enrollment	14,643	13,000	13,000	13,000	11,500	11,500	11,500
Ratio of Pupils to Religious Teachers	38.3	56.3	56.3	56.3	94.3	94.3	94.3
Operating Costs Per Pupil	$ 489	$ 1,028	$ 1,103	$ 1,188	$ 1,470	$ 1,656	$ 1,891
Total Operating Deficit	$1.4 million	$6.6 million	$7.5 million	$8.6 million	$8.8 million	$11.0 million	$13.7 million
Percentage of Ordinary Church Revenues Required for Elementary and Secondary School Subsidy	43	139	174	221	158	218	323
External Aid Required Per Pupil - Elementary and Secondary	--	$ 285	$ 389	$ 529	$ 457	$ 699	$ 1,117

TABLE 5

PROJECTIONS OF CATHOLIC SCHOOL COSTS AND REVENUES--DIOCESE OF NEW ORLEANS

		1975			1980		
	1970	Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation	Low Cost Full Consolidation	Moderate Cost Partial Consolidation	High Cost Zero Consolidation
ELEMENTARY							
Enrollment	52,706	41,500	41,500	41,500	32,650	32,650	32,650
Ratio of Pupils to Religious Teachers	133.8	220.8	220.8	220.8	418.6	418.6	418.6
Operating Costs Per Pupil	$ 220	$ 540	$ 609	$ 677	$ 717	$ 873	$ 1,118
Total Operating Deficit	$4.2 million	$14.6 million	$17.4 million	$21.1 million	$15.2 million	$20.3 million	$28.3 million
SECONDARY							
Enrollment	19,429	19,350	19,350	19,350	19,200	19,200	19,200
Ratio of Pupils to Religious Teachers	60.2	99.8	99.8	99.8	190.1	190.1	190.1
Operating Costs Per Pupil	$ 455	$ 853	$ 855	$ 857	$ 1,141	$ 1,147	$ 1,153
Total Operating Deficit	$1.0 million	$6.1 million	$6.16 million	$6.19 million	$8.1 million	$8.2 million	$8.4 million
Percent of Ordinary Church Revenues Required for Elementary and Secondary School subsidy	36	140	160	184	153	187	240
External Aid Required Per Pupil-Elem. & Sec.	--	$ 252	$ 300	$ 360	$ 344	$ 445	$ 601

VII. ESTIMATED MARGINAL COSTS OF ABSORBING NONPUBLIC SCHOOL STUDENTS IN FIVE PUBLIC SCHOOL SYSTEMS: SELECTED CASE STUDIES

Thomas R. Swartz

CONTENTS

I. Introduction. 366

II. The Results of the City-by-City Analysis . . . 367

III. Conclusion 384

Appendix D 610

I. INTRODUCTION

In order to extend the analysis of marginal costs incurred in the absorption of nonpublic school students in the public school system which was performed on a national basis, an additional study was conducted in five cities--San Francisco, St. Louis, Miami, Providence, and New Orleans. The choice of these specific locations was governed by a desire for geographical, size, and situational diversity. Using the same basic procedures as employed in the national study, it was possible at the city level of analysis, to estimate marginal costs individually for the elementary and secondary systems. In addition, the educational organization of four of the five cities allowed for a subdivision into two or more component parts providing an even further detailed analysis. For example, St. Louis was separated into St. Louis City and St. Louis County--the suburban fringe comprised of 26 distinct school districts. Dade County, Florida, (Miami) was divided into the six established school districts, whereas both San Francisco and New Orleans schools were identified on a Title I and non-Title I basis. Essentially, these subdivisions provide a rough approximation of a "center city" and an "other urban" component. Providence, the smallest of the five cities, was treated as a single unit.[1]

II. THE RESULTS OF THE CITY-BY-CITY ANALYSIS

Table XIV summarizes the results of the three total cost estimates for San Francisco. The analysis indicates that the costs associated with absorbing elementary students in Title I schools is substantially less than the costs of absorbing non-Title I elementary students. This is in part due to the smaller number of nonpublic students in Title I areas--2,374 compared to 11,378--but more importantly it is due to the faster rate of decline in public school enrollment and in pupil/teacher ratios in Title I areas compared to non-Title I areas. Enrollments in Title I public schools have consistently declined since 1965 from a high of 7,771 to a low of 6,447 in 1970, while non-Title I enrollments continued to increase until 1967, when they reached a high of 44,155 and have only fallen to 41,383 by 1970. Pupil/teacher ratios have consistently fallen in both areas, however, the decline from 27.95 to 20.86 in Title I schools generates far more capacity than the decline from 28.93 to 25.33 in non-Title I schools. Thus the estimated total costs for elementary Title I costs vary from zero under the "high" and "low" excess capacity formula to $1,822,885 under the "crude excess capacity" formula. (See Appendix D p.   for excess capacity definition.) Non-Title I elementary costs vary from a low of $12,281,481--of which $8,221,037 are construction costs--to a high of $19,656,737--of which $12,675,230 are construction costs.

Table XIV

Cost Estimates for Total Absorption of Non-Public Students in the San Francisco Unified School District 1970
Under Alternative Capacity Formulae

Cost Estimates Under High Excess Capacity Formula

	Net Influx (NI) (Non-Public less High Excess Cap.	Instruction Costs			Other Instruct. Per Pupil x NI	Other Current Ex. per pupil x(P/T70/P/TH) x NI	Construction Costs	Total Costs
		NI/(P/T)H (No. of teachers	Average Teacher Salary	Total Teacher Costs				
Elementary								
Title I	0	0	0	0	0	0	0	0
Non-title I	5,753	199	$11,601	$2,308,599	$704,742	$1,047,103	$8,221,037	$12,281,481
Total	5,682	197	$11,601	$2,285,397	$696,045	$1,034,180	$8,119,578	$12,135,200
Junior High	140	6	$12,823	$ 76,938	$ 24,985	$ 22,845	$ 318,080	$ 442,848
Senior High	2,567	106	$12,823	$1,359,238	$733,468	$ 417,573	$5,832,224	$ 8,342,503

Cost Estimates Under Crude Excess Capacity Formula

	Net Influx (NI) (Non-Public Less High Excess Cap.	Instruction Costs			Full Variable CE per Pupil x NI	Partial Variable CE per Pupil X(P/T/70/P/T 70 x NI	Construction Costs	Total Costs
		NI/(P/T) 1970 (No. of teachers)	Average Teacher Salary	Total Teacher Costs				
Elementary								
Title I	786	38	$11,601	$ 440,838	$ 96,285	$ 162,568	$1,123,194	$ 1,822,885
Title II	8,870	350	$11,601	$4,060,350	$1,086,575	$1,834,582	$12,675,230	$19,656,737
Total	10,133	412	$11,601	$4,779,612	$1,241,292	$2,095,808	$14,480,057	$22,596,769
Junior High	5,062	294	$12,823	$3,769,922	$ 903,415	$1,041,607	$11,500,864	$17,215,808
Senior High	4,094	210	$12,823	$2,692,830	$ 501,515	$ 822,198	$ 9,301,568	$13,048,111

Table XIV

Cost Estimates for Total Absorption of Non-Public Students in the San Francisco Unified School District 1970 (continued)

	Net Influx (NI) (Non-Public less Low Excess Cap.	Cost Estimates Under Low Excess Capacity Formula						
		Instructional Costs			Full Variable CE per Pupil x NI	Partial Variable CE per Pupil x (P/T)70/(P/T)P	Construction Costs	Total Costs
		NI/(P/T)P (No. of teachers	Average teacher Salary	Total Teacher Costs				
Elementary								
Title I	0	0	0	0	0	0	0	0
Title II	8,155	297	$11,601	$3,445,497	$ 998,987	$1,551,733	$11,653,495	$17,649,712
Total	8,946	330	$11,601	$3,828,330	$1,095,885	$1,702,244	$12,783,834	$19,410,293
Junior High	3,715	198	$12,823	$2,538,954	$ 663,016	$ 700,240	$ 8,440,480	$12,342,690
Senior High	2,567	106	$12,823	$1,359,238	$ 733,468	$ 417,573	$ 5,832,224	$ 8,342,503

Junior and Senior High Schools total costs are estimated to be \$442,848 and \$8,342,503 under the "high excess capacity" formula, \$17,215,808 and \$13,048,111 under the "crude excess capacity" formula, and \$12,342,690 and \$8,342,503 under the "low excess capacity" formula.[2]

The same cost pattern that is seen in San Francisco emerged in New Orleans. As Table XV indicates, total costs for the absorption of nonpublic students in Title I schools is substantially below the costs for non-Title I schools. Indeed, under the "high" and the "low" excess capacity formula the cost of absorbing Title I students at both the elementary and secondary level are zero. The costs of absorbing non-Title I students are positive under all three formulas.[3]

The total cost estimates for Miami are found in Table XVI. Total costs are generally higher for the elementary schools than they are for the sum of the junior and senior high schools. As would be expected the cost estimates are lower under the "high excess capacity" estimate than they are under the "crude excess capacity" estimate which in turn is lower than the "low excess capacity" estimate. Total costs vary across the country, with the lowest total cost areas being the Northwest and the South, while the highest cost area is the South Central.

It was possible in St. Louis to examine both the city of St. Louis and St. Louis County--a primarily suburban area which is composed

Table XV
New Orleans Cost Estimates for Total Absorption of Non-Public Students 1970 Under Alternative Capacity Formulae

Costs Under High Capacity Formula

	Net Influx (NI) Non-Public less High Ex. Cap.	Instruction Costs			Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x P/T1970/P/TH x NI	Construction Costs per Pupil x NI	Total Costs
		NI (P/T)H No. of Teachers	Average Teacher Salary	Total Teacher Costs				
Elementary (K-6)								
Title I	0	0	0	0	0	0	0	0
Non-Title I	7,405	240	$8,515	$2,043,600	$ 566,557	$ 734,206	$10,344,785	$13,689,148
Total	5,499	168	8,515	1,430,520	420,728	552,045	7,682,103	10,085,396
Secondary (7-12)								
Title I	0	0	0	0	0	0	0	0
Non-Title I	13,868	681	8,863	6,035,703	1,061,041	1,598,426	34,545,188	43,146,358
Total	16,076	750	8,863	6,647,250	1,229,975	1,773,344	40,045,316	49,695,885

Costs Under Crude Capacity Formula

	Net Influx (NI) Non-Public less High Ex. Cap.	Instruction Costs			Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x NI	Construction Costs per Pupil x NI	Total Costs
		NI (P/T) 1970 No. of Teachers	Average Teacher Salary	Total Teacher Costs				
Elementary (K-6)								
Title I	1,143	42	$8,515	$ 357,630	$ 87,451	$ 141,663	$ 1,596,771	$ 2,183,515
Non-Title I	8,940	361	8,515	3,073,915	683,999	1,108,024	12,489,180	17,355,118
Total	13,309	504	8,515	4,291,560	1,018,272	1,649,517	18,592,673	
Secondary (7-12)								
Title I	1,326	69	8,863	611,547	101,452	164,344	3,303,066	4,180,409
Non-Title I	15,385	816	8,863	7,232,208	1,177,106	1,906,817	38,324,035	48,640,166
Total	18,266	961	8,863	8,517,343	1,397,532	2,263,888	45,500,606	57,679,269

Table XV

New Orleans Cost Estimates for Total Absorption of Non-Public Students 1970 Under Alternative Capacity Formulae (continued)

Costs Under Low Capacity Formula

	Net Influx (NI) Non-Public less High Ex. Cap.	Instruction Costs			Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x NI	Construction Costs per Pupil x NI	Total Costs
		NI (P/T) 1970 No. of Teachers	Average Teacher Salary	Total Teacher Costs				
Elementary (K-6)								
Title I	0	0	0	0	0	0	0	0
Non-Title I	9,482	350	$8,515	$2,980,250	$ 725,468	$1,069,474	$13,246,354	$18,021,546
Total	14,774	516	8,515	4,393,740	1,130,359	1,684,531	20,639,278	27,847,908
Secondary (7-12)								
Title I	0	0	0	0	0	0	0	0
Non-Title I	13,698	684	8,863	6,062,292	$1,063,335	1,601,883	34,619,918	43,347,428
Total	16,886	842	8,863	$7,462,646	$1,291,948	$1,988,158	$42,063,026	$52,805,778

Table XVI

Miami Cost Estimates Under High Capacity Formula

District and Grade Level	Net Influx NI Non-Public Less High Ex. Cap.	Instruction Costs			Other School Services Per Pupil x NI	Other Current Ex. Per Pupil x (P/T)1970/(P/T)H x NI	Const. Cost Per Pupil x NI	Total Cost
		NI/(P/T)H No. of Teachers	Average Teacher Salary	Total Teacher Costs				
Northeast								
Elementary	3,697	143	$ 9,898	$1,415,414	$ 509,140	$ 525,270	$ 4,961,374	$ 7,411,198
Junior High	791	33	10,099	333,267	108,992	106,469	1,568,553	2,117,281
Senior High	0	--	10,099	--	--	--	--	--
Northwest								
Elementary	892	35	9,898	346,430	122,909	126,735	1,197,064	1,793,138
Junior High	0	--	10,009	--	--	--	--	--
Senior High	316	15	10,009	151,485	43,452	44,426	627,576	866,939
North Central								
Elementary	1,968	79	9,898	781,942	271,171	259,008	2,641,056	3,953,177
Junior High	0	--	10,099	--	--	--	--	--
Senior High	0	--	10,099	--	--	--	--	--
South Central								
Elementary	3,976	157	9,898	1,553,986	547,853	475,728	5,335,792	7,912,359
Junior High	0	--	10,099	--	--	--	--	--
Senior High	1,508	68	10,099	686,732	207,787	212,010	2,994,888	4,101,417
Southwest								
Elementary	3,085	125	9,898	1,237,250	425,082	461,393	4,140,070	6,263,795
Junior High	466	19	10,099	191,881	64,210	66,908	925,476	1,248,475
Senior High	0	--	10,099	--	--	--	--	--
South								
Elementary	933	38	9,898	376,124	136,825	133,658	1,332,606	1,979,213
Junior High	0	--	10,099	--	--	--	--	--
Senior High	146	7	10,099	70,693	20,117	21,617	289,956	402,382
Total	22,394	949	$ 9,999	$9,489,051	$3,085,669	$3,114,781	$37,263,616	$52,953,117

TABLE XVI

Miami Costs Under Low Capacity Formula (con't.)

District and Grade Level	Net Influx Non-Public Less Low Ex. Cap.	Instruction Costs NI/(P/T)P No. of Teachers	Instruction Costs Average Teacher Salary	Instruction Costs Total Teacher Costs	Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x (P/T)1970/(P/T)P x NI	Const. Costs Per Pupil x NI	Total Costs
Northeast								
Elementary	5,344*	234	$ 9,898	$ 2,316,132	$ 736,350	$ 863,216	$ 7,171,648	$ 11,087,346
Junior High	2,103*	100	10,099	1,009,900	289,772	327,101	4,176,558	5,803,331
Senior High	160	8	10,099	80,792	20,046	23,690	317,760	442,288
Northwest								
Elementary	2,887*	125	9,898	1,237,250	397,800	453,374	3,874,354	5,962,778
Junior High	805	35	10,099	353,465	110,921	116,781	1,598,730	2,179,897
Senior High	747*	37	10,099	373,663	102,929	112,842	1,483,542	2,072,976
North Central								
Elementary	5,552*	25	9,898	247,450	765,010	838,685	7,450,784	9,301,929
Junior High	2,609*	128	10,099	1,292,672	359,494	433,120	5,181,474	7,266,760
Senior High	0	0	10,099	--	--	--	--	--
South Central								
Elementary	7,785*	351	9,898	3,474,198	1,072,695	1,176,002	10,447,470	16,170,365
Junior High	1,933	95	10,099	959,405	266,348	257,302	3,838,938	5,321,993
Senior High	2,241*	108	10,099	1,090,692	308,787	338,525	4,450,626	6,188,630
Southwest								
Elementary	3,355*	138	9,898	1,365,924	462,285	506,806	4,502,410	6,837,425
Junior High	1,599*	71	10,099	717,029	220,326	253,489	3,175,614	4,366,458
Senior High	995*	49	10,099	494,851	137,101	150,305	1,976,070	2,758,327
South								
Elementary	4,101*	183	9,898	1,811,334	565,077	644,021	5,503,542	8,523,974
Junior High	812	39	10,099	393,861	111,885	120,225	1,612,632	2,238,603
Senior High	146	7	10,099	70,693	20,117	21,617	289,956	402,383
Total	42,814*	1,970	$ 9,999	$19,698,030	$5,899,341	$6,467,483	$71,242,496	$103,307,350

*Indicates current over utilization--total is greater than non-public enrollment

Table XVI

Miami Costs Under Crude Capacity Formula (con't.)

District and Grade Level	Net Influx NI Non-Public Less High Ex. Cap.	Instruction Cost			Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x NI	Const. Cost Per Pupil x NI	Total Cost
		NI/(P/T) 1970 No. of Teachers	Average Teacher Salary	Total Teacher Costs				
Northeast								
Elementary	4,090	166	$ 9,898	$ 1,643,068	$ 563,561	$ 611,700	$ 5,488,780	$ 8,307,109
Junior High	1,737	79	10,099	797,821	239,341	259,786	3,449,682	4,746,630
Senior High	610	30	10,099	302,970	84,052	91,232	1,211,460	1,689,714
Northwest								
Elementary	1,460	61	9,898	603,778	201,173	218,358	1,959,320	2,982,629
Junior High	1,081	49	10,099	494,851	148,951	161,674	2,146,866	2,952,342
Senior High	739	36	10,099	363,564	101,827	110,525	1,467,654	2,043,570
North Central								
Elementary	5,423	247	9,898	2,444,806	747,235	811,064	7,277,666	11,280,771
Junior High	1,067	47	10,099	474,653	147,022	159,581	2,119,062	2,900,318
Senior High	944	58	10,099	585,742	130,074	141,185	1,874,784	2,731,785
South Central								
Elementary	6,058	272	9,898	2,692,256	834,732	906,034	8,129,136	12,562,158
Junior High	2,155	120	10,099	1,211,880	296,937	322,302	4,279,830	6,110,949
Senior High	2,179	105	10,099	1,060,395	300,244	325,891	4,327,494	6,014,024
Southwest								
Elementary	2,431	99	9,898	979,902	334,967	363,580	3,262,402	4,940,851
Junior High	1,181	51	10,099	515,049	162,730	176,630	2,345,466	3,199,875
Senior High	950	47	10,099	474,653	130,901	142,082	1,886,700	2,634,336
South								
Elementary	2,618	111	9,898	1,098,678	360,734	391,548	3,513,356	5,364,316
Junior High	831	40	10,099	403,960	114,503	124,284	1,650,366	2,293,113
Senior High	178	9	10,099	90,801	24,527	26,622	353,508	495,548
Total	38,944	1,779	$ 9,999	$17,788,221	$5,366,094	$5,824,465	$64,802,816	$93,781,596

of twenty-six separate school districts. The entire area encompassed by the school district of St. Louis City can not be considered "inner city", however, it does take on many of the same characteristics as were found in the Title I areas of San Francisco and New Orleans. An examination of the predominantly suburban St. Louis County yields a mixed picture: the elementary school system would incur a substantial cost in absorbing the nonpublic school students in their school districts, but the secondary schools would experience relatively low costs.

Indeed, Table XVII indicates that the cost of absorbing nonpublic students is zero under the "high excess capacity" formula, $42,012,162 under the "crude excess capacity" formula and $29,490,128 under the "low excess capacity"formula. The elementary picture in St. Louis County is just the reverse, with the lowest cost estimate being $74,938,763. The basic reason for this inconsistent picture in the county is the emphasis that has been placed on increasing the number of teachers in secondary schools.[4] The total number of elementary teachers has increased by less than the number of high school teachers, even though there are substantially more than twice the number of elementary students. The result is that pupil/teacher ratios for secondary schools have fallen from 18.05 to 14.48, while the pupil/teacher ratios at the elementary level have increased from 24.85 to 25.71.[5]

Table XVII

St. Louis City and County Cost Estimates for Total Absorption of Non-Public Students 1969 Under Alternative Cost Formulae

Costs Under High Capacity Formula

	Net Influx (NI) Non-Public less High Ex. Cap.	Instruction Costs			Other School Services Per Pupil X NI	Other Current Exp. Per Pupil X P/T70/P/T X NI	Const. Costs Per Pupil X NI	Total Costs
		NI/(P/T)H (No. of Teachers)	Average teacher salary	Total teacher costs				
St. Louis City								
Elementary	9,851	308	$ 11,279	$ 3,473,932	$ 447,728	$1,764,314	$10,717,888	$16,403,862
Secondary (General High)	6,529	293	11,507	3,371,551	296,743	1,129,974	13,168,993	17,967,261
St. Louis County								
Elementary	43,515	1,693	10,489	17,757,877	2,866,333	6,970,233	47,344,320	74,938,763
Secondary	0	0	0	0	0	0	0	0

Costs Under Crude Capacity Formula

	Net Influx (NI) Non-Public less Crude Ex. Cap.	Instruction Costs			Other School Services Per Pupil X NI	Other Current Exp. Per Pupil X NI	Const. Costs Per Pupil X NI	Total Costs
		NI/P/T 70 (No. of teachers)	Average teacher salary	Total teacher costs				
St. Louis City								
Elementary	17,158	601	$ 11,279	$ 6,778,679	$ 779,831	$3,452,876	$18,667,904	$29,679,290
Secondary (General High)	8,389	436	11,507	5,017,052	381,280	1,688,202	16,920,613	24,007,147
St. Louis County								
Elementary	43,515	1,693	10,489	17,757,877	2,866,333	6,970,233	47,344,320	74,938,763
Secondary	14,088	973	10,701	10,412,073	927,977	2,256,616	28,415,496	42,012,162

Table XVII
St. Louis City and County Cost Estimates for Total Absorption of
Non-Public Students 1969 Under Alternative Cost Formulae (continued)

Costs Under Low Capacity Formula

	Net Influx (NI) Non-Public less Low Ex. Cap.	Instruction Costs			Other School Services Per Pupil X NI	Other Current Exp. Per Pupil X NI X $\frac{P/T\ 1970}{(P/T)\ P}$	Const. Costs Per Pupil X NI	Total Costs
		NI/(P/T)p (No. of Teachers)	Average Teacher Salary	Total Teacher Costs				
St. Louis City								
Elementary	13,841	451	$ 11,279	$ 5,086,829	$ 629,073	$2,590,343	$15,059,008	$23,652,253
Secondary (General High)	7,424	341	11,507	3,923,887	337,421	1,314,716	14,974,208	20,550,232
St. Louis County								
Elementary	45,989	1,822	10,489	19,110,958	3,029,295	7,513,683	50,036,032	79,689,968*
Secondary	10,080	652	10,701	6,977,052	663,970	1,517,746	20,331,360	29,490,128

*Includes cost of absorbing 2,474 public school students - currently over-using capacity.

The smallest city analyzed was Providence, Rhode Island. Even though the number of public and nonpublic students is relatively small, the costs of absorption are high in this city. Unlike most cases the cost associated with absorbing secondary students is uniformly higher than it is for elementary students. Providence has experienced a declining enrollment at both the secondary and elementary level. However, the decline at the elementary level has been more precipitous. This declining enrollment pattern, coupled with a slowly growing elementary teacher staff and a slowly declining secondary teacher staff, has resulted in pupil/teacher ratics remaining constant at the secondary level and declining at the elementary level.

Many definitional questions arose in the City-by-City analysis, but none as perplexing as the Providence case. New categories of students and teachers seemed to appear each year, with few clues whether these new classifications should be placed in the elementary or secondary level. Thus the pupil/teacher ratios by elementary and secondary levels are suspect. The reader is cautioned not to rely upon the elementary and secondary cost estimates but rather the total elementary secondary cost estimates. Here it is found that the total costs for N-12 is approximately $30,500,000 under all three cost estimates.

All the cities are summarized in Table XIX. This table indicates the average marginal costs under the "high" and the "low" escess

Table XVIII

Cost Estimates for Total Absorption of Providence Non-Public Students 1970 Under Alternative Capacity Formulae

High Capacity Estimates

	Net Influx (NI) Non-Public less High Excess Cap.	Instruction Costs			Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x (P/T)70 (P/T)H x NI	Construction Costs Per Pupil x NI	Total Costs
		NI/(P/T)H (No. of teachers)	Average Teacher Salary	Total Teachers Cost				
Elementary	1,351	48	$8,782	$ 421,536	$ 73,859	$ 558,503	$ 2,204,832	$ 3,258,730
Secondary	5,201	294	$8,818	$2,592,492	$ 284,339	$2,756,530	$23,841,384	$29,474,745
Total	7,553	341	$8,800	$3,000,800	$ 412,923	$3,602,781	$23,474,724	$30,491,228

Crude Capacity Estimates

	Net Influx (NI) Non-Public less High Excess Cap.	Instruction Costs			Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x NI	Construction Costs Per Pupil	Total Costs
		NI(P/T)1970 (No. of teachers)	Average Teacher Salary	Total Teachers Cost				
Elementary	2,723	124	$8,782	$1,088,968	$ 148,866	$1,443,190	$ 4,443,936	$ 7,124,960
Secondary	4,651	263	$8,818	$2,319,134	$ 254,270	$2,465,030	$21,320,184	$26,358,618
Total	7,374	372	$8,800	$3,273,600	$ 403,137	$3,908,220	$22,918,392	$30,503,349

Low Capacity Estimates

	Net Influx (NI) Non-Public less High Excess Cap.	Instruction Costs			Other School Services Per Pupil x NI	Other Current Exp. Per Pupil x (P/T)70 (P/T) P x NI	Construction Costs Per Pupil x NI	Total Costs
		NI(P/T)P (No. of teachers)	Average Teacher Salary	Total Teachers Cost				
Elementary	1,351	48	$8,782	$ 421,536	$ 73,859	$ 558,503	$ 2,204,832	$ 3,258,730
Secondary	6,680	382	$8,818	$3,368,476	$ 365,196	$3,575,804	$30,621,120	$37,930,596
Total	7,553	341	$8,800	$3,000,800	$ 412,923	$3,602,781	$23,474,724	$30,491,228

Table XIX

Average Marginal Costs City by City

	High Excess Capacity			Low Excess Capacity		
	Nonpublic Students	Total Current Expenditures	Marginal Cost	Nonpublic Students	Total Current Expenditures	Marginal Cost
Miami	41,097	15,689,501	382	41,097	32,064,854	780
Northeast						
Elementary	4,351	2,449,824	563	4,351	3,915,698	900
Junior High	1,737	548,728	316	1,737	1,626,773	937
Senior High	610	0	0	610	124,528	204
Northwest						
Elementary	1,966	596,074	303	1,966	2,088,424	1,062
Junior High	1,081	0	0	1,081	581,167	538
Senior High	739	239,363	324	739	589,434	798
North Central						
Elementary	5,349	1,312,121	245	5,349	1,851,145	346
Junior High	1,625	0	0	1,625	2,085,286	1,284
Senior High	944	0	0	944	0	0
South Central						
Elementary	7,686	2,576,567	335	7,686	5,722,895	745
Junior High	3,471	0	0	3,471	1,483,055	427
Senior High	2,179	1,106,529	508	2,179	1,738,004	798
Southwest						
Elementary	3,085	2,123,725	688	3,085	2,335,015	757
Junior High	1,181	322,999	273	1,181	1,190,844	1,008
Senior High	950	0	0	950	782,257	823

Table XIX

Average Marginal Costs City by City (con't.)

	High Excess Capacity			Low Excess Capacity		
	Nonpublic Students	Total Current Expenditures	Marginal Cost	Nonpublic Students	Total Current Expenditures	Marginal Cost
South						
Elementary	3,134	646,607	206	3,134	3,020,432	964
Junior High	831	0	0	831	625,971	753
Senior High	178	112,426		178	112,427	
St. Louis						
Elementary	20,402	5,685,974	279	20,402	8,593,245	421
Secondary	9,264	4,798,268	518	9,264	5,576,024	602
County	57,603	27,594,443	479	57,603	38,812,704	674
Elementary	43,515	27,594,443	634	43,515	29,653,936	681
Secondary	14,088	0	0	14,088	9,158,768	650
San Francisco						
Elementary	13,752	4,015,622	292	13,752	6,626,459	482
Title I	2,374	0	0	2,374	0	0
Non Title I	10,440	4,060,444	389	10,440	5,996,217	574
Junior High	6,556	124,768	19	6,556	3,903,210	595
Senior High	5,639	2,510,079	445	5,639	2,510,279	445
New Orleans						
Title I	12,795	0	0	12,795	0	0
Non Title I	26,141	11,945,533	457	26,141	13,502,702	517
Elementary	19,788	2,403,293	121	19,788	7,208,630	364
Title I	9,039	0	0	9,039	0	0
Non Title I	10,749	3,344,363	311	10,749	4,775,192	444
Secondary	19,148	9,650,569	504	19,148	10,742,752	561
Title I	3,756	0	0	3,756	0	0
Non Title I	15,392	8,601,170	559	15,392	8,727,510	567

Table XIX

Average Marginal Costs City by City (con't.)

	High Excess Capacity			Low Excess Capacity		
	Nonpublic Students	Total Current Expenditures	Marginal Cost	Nonpublic Students	Total Current Expenditures	Marginal Cost
Providence	10,376	7,016,504	676	10,376	7,016,504	676
Elementary	5,175	1,053,898	204	5,175	1,053,898	204
Secondary	5,201	5,633,361	1,083	5,201	7,309,476	1,405

capacity formulas, for each city and for the various subdivisions of the cities. It is quite evident that the costs of absorption are higher in urban areas other than the "urban core." Three factors are the probable cause for this result. First, there has been a steady loss of students in the urban core relative to other urban and suburban areas. This loss of enrollment has generated some potential capacity for nonpublic students. Second, pupil/teacher ratios have generally fallen faster in the urban core area compared to other areas. This also increases the amount of potential capacity. Third, there are relatively few nonpublic students in the urban core. Many nonpublic schools have closed as the racial mix in the inner city changes.[6]

III. CONCLUSION

The city-by-city analysis further refines the cost conclusions. Not only are high costs concentrated in a select group of states, and concentrated in the central cities located in these states, but also the costs will be concentrated in the non-urban core regions of the affected cities.

FOOTNOTES

1. Numerous adjustments were made to the enrollment, teacher and cost data that were collected in the five cities. These adjustments and a discussion of several unique problems confronting individual cities are found in Appendix D.

2. Note, there are no Title I Junior or Senior High Schools in San Francisco.

3. For some observations the costs associated with the total Title I and non-Title I schools are calculated to be greater than the individual sum of Title I and non-Title I schools. For example, under the "high excess capacity" formula, zero costs are estimated for Title I secondary schools, $43,146,358 is estimated as the total costs for both Title I and non-Title I combined. This is a result of the new pupil/teacher ratios that are generated when students and teachers from all secondary schools are grouped together. These lower pupil/teacher ratios generate less excess capacity than the excess capacity generates when the Title I and non-Title I schools are separated.

4\.

	1969	1968	1967	1966	1965
Elementary (1-8) teachers:	5276	5214	4984	4711	4529
Secondary (9-12) teachers:	4124	3671	3254	2826	2549

5. Although the St. Louis County case is extreme, an examination of pupil/teacher ratios reveals that secondary ratios have fallen faster than elementary ratios over the past six years. This emphasis on secondary education is widespread and can be detected in the vast majority of states.

6. Note that there remains a high concentration of nonpublic students in urban areas other than the core.

VIII. THE DETERMINANTS OF ENROLLMENT IN CATHOLIC SCHOOLS: AN EMPIRICAL ANALYSIS OF THE ARCHDIOCESE OF ST. LOUIS

Dennis J. Dugan

CONTENTS

I. Introduction. 388

II. Home, Community, and School Influences Upon the Decision Variables 391

III. The Theoretical Model 397

IV. Supply-Side Constraints--The Influence of Rationing Upon the Decision 412

V. The Model Applied to Geographical Divisions of the Archdiocese of St. Louis 425

VI. Conclusion 443

Appendix E 618

I. INTRODUCTION

When a Catholic family is deciding where to send its children to school, it has the choice of enrolling them in a public, private, or Catholic school. In the United States, Catholic elementary and secondary schools have historically been an alternative to the public school system. This choice among educational alternatives is a basic decision that is made within the family unit. Some segments of our society, perhaps those who are not Catholics, may discount one of these options quite heavily, but these alternatives are part-and-parcel of the decision-making process in which educational alternatives are evaluated, some discarded, and a final choice made.

This paper presents a theoretical model that systematically considers the choices confronting Catholic families when they decide to send their children to school, be it public, private, or Catholic. A decision model is developed and alternatives are specified explicitly; and the enrollment rates at elementary and secondary schools are determined by a number of economic and non-economic factors. The decision process that each Catholic family faces is analyzed at three distinct stages where educational choices are made: (1) the pre-school stage in which plans are formulated for acquiring educational services; (2) the elementary school stage where a definite decision has been made; and (3) the secondary level of education where another decision has been made.

This breakdown of educational decisions permits an analysis that takes into explicit account the institutional differences that exist in the educational system, especially in the Catholic educational system, between the elementary and secondary levels. An analysis of the family plans for the education of its pre-school children yields some indication of what enrollment in Catholic schools will be in the near future.

When a child enters elementary school, it may appear that he is simply taking the first step in a long series of steps up the educational ladder. However, in today's society, education has many more implications than merely putting in time within four walls to satisfy a compulsory education law. Indeed, education is often thought of as a vehicle of social mobility and a tool that enables the general populace to pull itself up by the bootstraps. In this context education takes upon itself the meaningful task of creating productive members of the economic society and enlightened citizens. The economic rate of return to education has been shown to be substantial, thus making the educational decisions more crucial than casual. In fact, the decision process in the educational arena may be sequential, necessitating that educational alternatives be weighed a number of times along the educational ladder. These educational decisions are quite important for they may ultimately lead to higher education and better job opportunities.

Within this context, educational decisions are important, and they become even more so when one considers some of the "consumption" benefits associated with them. Of particular interest is the religious benefits that emanate, along with the human capital benefits from Catholic education. The religious benefits may be of primary concern here because it has never been shown that Catholic schools produced inferior productive agents for the economic system. Thus, on several grounds, these educational decisions of Catholic families are worthy of investigation. The 1969 study of the Catholic schools of the Archdiocese of St. Louis by the Office of Educational Research of the University of Notre Dame provides adequate data to empirically investigate these educational decisions. Although the empirical results of this study are not applicable to the total Catholic education picture in the United States, it surely may be indicative of a number of the characteristics of and problems facing Catholic education today.

In Section II, the various home, community, and school influences upon the educational decisions of Catholic families are discussed. Furthermore, the general characteristics of the Archdiocese of St. Louis data are presented. In Section III, a theoretical model is postulated to explain the decision process, and preliminary empirical evidence is presented. In Section IV, non-market constraints, such as admission standards, are introduced and their influence upon enrollment rates is specified. This more complete model is then empirically estimated and the results elaborated. In Section V, the model is applied to three geographic regions within the Archdiocese of St. Louis. In the final section, general conclusions are drawn from the study.

II. HOME, COMMUNITY, AND SCHOOL INFLUENCES UPON THE DECISION VARIABLES

The educational decision-making process, taken in its entirety, is of long duration, intricate, and of such a nature that multifarious factors enter the process at different stages and, possibly, exert different influences at different stages. Conceptually, this complex decision process can be simplified into the form of a discrete, decision-making model which specifies, a priori, important functions where decisions pertinent to education are made. It is the purpose of this analysis to isolate several of those junctures and simultaneously to investigate the impact of home, community, and school influences upon those decisions. As a starting point, it may be of interest to isolate the plans of families with pre-schoolers, for some decision concerning education must be made at that time and once a decision is made, it is not a simple process to pursue another course when in mid-stream.

Concerning these plans of families with pre-schoolers, the Archdiocese of St. Louis data show that 47.3 percent planned to send their children to Catholic schools. This statistic, along with other descriptive statistics, are presented in Table 1. (See the Appendix for more extensive detail concerning the original sample of parishes in the Archdiocese of St. Louis, what quality controls were imposed, and the size and characteristics of the final sample of parishes.) That figure is somewhat low when it is compared to the percent of eligible elementary school

TABLE 1. Dispersion of Variables.

Variable		Mean	Coefficient of Variation
A.	Decision Variables		
1	Percent of Pre-School Children Planning to Attend Catholic Schools	47.3	.316
2.	Percent of Elementary Children Attending Catholic Schools	72.3	.310
3.	Percent of High School Students Attending Catholic Schools	59.6	.354
B.	Input Variables		
1.	Family Income	$10,820	.283
2.	Family Size	3.77	.212
3.	Percent Non-White	3.48	4.43
4.	Age of Head of Household	45.5 years	.098
5.	Education of Head of Household	12.4 years	.114
6.	Percent Home-Ownership	82.9	.216
7.	Weekly Contributions	$5.06	.248
8.	Percent Rationed	11.7	.826
9.	Percent Religious Teachers	49.6	.255
10.	Current Expenditures per Pupil	$465.77	.270

children who actually attend parish schools, which is 72.3 percent. The percent of high school students actually attending Catholic schools is 59.6 percent for the autumn of 1969. The latter two enrollment rates indicate that the parish elementary schools accommodate a larger proportion of the eligible students than do the regional high schools. This is a general characteristic of Catholic school systems throughout the country.

The elementary and secondary enrollment rates are the net result of a conscious decision concerning education, and they are two of the decision variables to be explained in this study. Several factors are at work that influence these rates, and several different approaches will be taken to isolate the impacts and the magnitudes of these impacts upon enrollment rates. It is convenient to separate the factors that influence the educational decision variables into three categories. The first category is the home environment, the general characteristics of the home that have an economic or sociological impact upon education decisions. One home enrivonment factor is the economic well-being of the family whose children are of school age. The empirical counterpart for this factor is average family income of the parish under investigation. Family income represents a source of financial aid to the potential student and it may also be an indication of the general life-style of the student, providing resources for goods and services that may incline the student to attain a particular type of education.

Another home environment factor is average family size, which represents the number of persons among whom education funds may be spread. Family size may have another impact upon the decision process because it may represent a certain amount of family interaction that is conducive to a particular type of education. Home ownership is an economic variable that may have some impact upon the education decision, for that variable is both an indication of the wealth or asset holdings of the family and an indication of family stability.

These explanatory or input variables are presented in Table 1, and their relationship to each other is depicted through simple correlations presented in Table 2. The high simple correlation between family income and age of .837 is an indication that education is an alternative or substitute variable for family income. Economic theory predicts this, for more education is rewarded in the market place with higher wages or salaries. Home ownership is positively related to family income, a commonly observed phenomenon that families which earn more are capable of buying more economic goods and services. These home environment variables include family income, family size, age of head of household, home ownership, and the average weekly contribution of families, an indication of the family's interest in supporting parish activities.

A community variable, percent non-white, represents those characteristics which are not caught by the other influences upon the decision

TABLE 2. Simple Correlations of Input Variables.

	Family Income	Family Size	Percent Non-White	Age of Head	Edu-cation of Head	Percent Home Owner-ship	Weekly Contri-butions	Percent Rationed	Percent Religious
Family Size	.347								
Percent Non-White	-.136	-.249							
Age of Head	-.133	-.753	.204						
Education of Head	.837	.246	-.029	-.174					
Percent Home-Ownership	.433	.643	-.291	-.461	.212				
Weekly Contributions	.717	.318	-.079	-.119	.571	.385			
Percent Rationed	-.158	.294	-.070	-.406	.246	.203	.128		
Percent Religious Teachers	-.312	-.244	.170	.232	-.326	-.183	-.398	-.158	
Current Expenditures	.062	-.433	.277	.397	.049	-.390	.006	.042	.277

variables and other factors that pertain to minority groups. The descriptive statistics in Tables 1 and 2 show that, although the percent non-white in the Archdiocese of St. Louis is quite low, it has negative simple correlations with family income, home ownership, and education. This indicates that for minority groups income, education, and home ownership are not on a par with the white segment of society.

Finally, two school variables are presented to give some indication of the quality of the Catholic elementary and secondary schools. These variables are percent of teachers who are religious and current expenditures per pupil. Almost half of the teachers in the Archdiocesan schools are relgious, and these represent a unique characteristic of the Catholic schools. Current expenditures per pupil averaged $465.77 for the Archdiocesan elementary schools, and that figure includes the contributed educational services of religious.

Each of these factors plus a rationing variable, that represents the percent of potential students who were denied spaces for one reason or another, will be included in a model to explain the education decision behavior of the Catholic families in the Archdiocese of St. Louis. This model will then be specified in a form that is susceptible to empirical estimation.

III. THE THEORETICAL MODEL

Consider the hypothetical decision in which a Catholic family is faced with an "either-or" decision of enrolling the children in a Catholic school or another type of school (public or private). If the family follows rational investment decision criteria, it will decide to have its children attend the Catholic school if the present value of the benefits associated with attending (discounted at the appropriate rate) are at least equal to the direct and opportunity costs (also discounted at the appropriate rate) of doing so. The present value of the benefits can be divided into two basic components: the expected value of the stream of increased earnings that accrue from a Catholic education, and the value of any direct consumption benefits from undertaking this activity. (One such consumption benefit may be the religious training at Catholic schools.) The direct cost of attending a Catholic school is the sum of several charges such as tuition, transportation costs, educational fees, etc. The opportunity cost, in turn, is the quality of the education offered at public schools, which presents itself at a zero cost to the family unit since it is financed by public taxes. These taxes are gathered independent of the possibility that the public educational facilities are not used by the particular family unit in question. Economists also include under the heading of "opportunity cost of education" the student's wage that could be earned at the best alternative during the time in attendance at school. Compulsory education and child labor laws preclude this aspect of opportunity cost being an overriding consideration in this study.

This decision criteria may be expressed in functional notation. The family unit will find it economically advantageous to invest in a Catholic education if and only if

$$(1) \qquad \sum_{t=1}^{n} \frac{X_t + Z_t}{(1 + r)^t} \geq \sum_{t=1}^{n} \frac{P_t + C_t}{(1 + r)^t}$$

where

X - Expected economic value in terms of increased earnings in year t resulting from a Catholic education.

Z - Expected economic value from the direct consumption benefits resulting from Catholic education in year t.

P - Direct costs of Catholic educational services in year t.

C - The indirect or opportunity costs of Catholic educational services in year t.

The focus here is upon those factors which have an impact upon the parents' plans for their pre-school children and the actual attendance rates of their elementary and secondary school children. For the Archdiocese of St. Louis, the factors that influence these decisions are the distinctive home, community and school characteristics of the area. The effect of the home environment is captured partially by family income, which represents the economic well-being of the student's family. This factor has several diverse impacts upon the decision variables, and, although it is not possible to separate out all of these impacts empirically, it is worth our while to mention these aspects here. First of all, family income represents a source of financial aid to the potential student, for it is from this source of funds that tuition and educational fees may be paid. If family income is high, a priori one would expect this student to be in a better position to have financial support than a student whose family income is lower. Secondly, family income may also be an indication of the general life-style of the student and thus it provides resources for goods and services that may enable the student to pursue the highest quality of education. Furthermore, a family with a high income may provide stimulus-response-reinforcement activities in the home, even in the pre-school years, that help the student achieve scholastically at a high rate in school and to be inclined toward scholastic endeavors. To be specific, certain activities such as reading in the home may reinforce the student's school experience--the natural outgrowth being the pursuit of the best education opportunities, be they public or Catholic.

Another home factor that has an impact upon these decisions is family size. This variable has a financial aspect together with environmental implications. Financially, family size represents the number of persons among whom education funds may be spread. A student from a smaller family is more likely to command educational resources of the family than a student from a large family since the bigger unit must allocate its scarce educational resources over a large number of individuals. Outside the realm of direct financial consideration, small family size may provide an incentive and motivation to pursue the best educational opportunity because he has close interaction with his parents. However, interaction effects among children of large families may work in the opposite direction with regard to the pursuit of educational opportunity. Traditionally, Catholic families have been relatively large in comparison to the average family size of the United States. Thus, family size may be an indicator of whether a family is or is not a traditional member of the Catholic Church. Although it is possible to combine family income with family size into one variable, namely, income per family member, they are separated for the analysis to isolate their differential impacts upon enrollment.

Other home factors that may have an impact upon these educational decisions are the age and education of the parents. In this study, age takes on two quite separate appearances. From the view of an economist, age represents an experience factor which is rewarded in the market place with a higher wage or salary. Within a study of Catholic schools, age may represent a more traditional view of the necessity of sending children to the Catholic school. The empirical results should shed some light upon which aspect of age dominates the decision process. Educational attainment has a tendency of perpetuating itself from generation to generation and its impact will be felt upon the decision variables. However, education is highly related to income and may be an alternative variable representing the concept of family income. Home ownership, a proxy for family wealth, may also have an impact upon the educational decision.

A community variable, percent non-white, represents those characteristics which are not caught by the other influences upon the decision variables and other factors that pertain to minority groups. These particular factors may be economic or racial discrimination or traits particular to a racial group. Finally, a taste factor representing, to some extent, the family interest in the parish activities and Catholic schooling is captured by the weekly contribution rate of the families.

To relate the decision variables to their explanatory variables regression analysis is employed. There are several different relations which are plausible, both from the standpoint of the variables to be included and the nature of the functional form to be used. A linear functional form with a limited number of independent variables will be considered here. The relationship between the decision variable and its determinants may be derived from an underlying relation pertaining to the individual family.

Consider the following relation between a family's Catholic education decision and its other characteristics:

$$(2) \quad D_{ij} = a_1 + a_2Y_{ij} + a_3A_{ij} + a_4F_{ij} + a_5H_{ij} + a_6N_{ij} + U_{ij}$$

where D_{ij} is the particular decision variable of the $i^{\underline{th}}$ family in the $j^{\underline{th}}$ parish. The output variable is not a continuous variable but a 0-1 binary variable which takes on the value 1 when a certain condition is met, such as planning to attend a Catholic school, and 0 otherwise. The other variables are defined as follows:

Y_{ij} - the family income of the $i^{\underline{th}}$ family in the $j^{\underline{th}}$ parish.

A_{ij} - the age of the head of household of the $i^{\underline{th}}$ family in the $j^{\underline{th}}$ parish.

F_{ij} - the size of the $i^{\underline{th}}$ family in the $j^{\underline{th}}$ parish.

H_{ij} - a binary variable assigned the value 1 if the $i^{\underline{th}}$ family in the $j^{\underline{th}}$ parish owns its own home and O otherwise.

N_{ij} - a binary variable assigned the value 1 if the $i^{\underline{th}}$ family in the $j^{\underline{th}}$ school is non-white and O otherwise.

U_{ij} - a randomly distributed error term.

Equation (2) relates each family decision to his own personal and environmental situation. Since the data are at the parish level, a similar relation is derived for each parish. Accordingly, for the $j^{\underline{th}}$ parish, equation (2) is summed over its n families, and dividing by n the following relation results:

$$(3)\quad \frac{1}{n}\sum_{i=1}^{n} D_{ij} = a_1 + a_2\frac{1}{n}\sum_{i=1}^{n} Y_{ij} + a_3\frac{1}{n}\sum_{i=1}^{n} A_{ij} + a_4\frac{1}{n}\sum_{i=1}^{n} F_{ij} + a_5\frac{1}{n}\sum_{i=1}^{n} H_{ij} + a_6\frac{1}{n}\sum_{i=1}^{n} N_{ij} + \frac{1}{n}\sum_{i=1}^{n} U_{ij}.$$

For the binary decision variables and the home-ownership and non-white variables, the sum of all positive entries divided by the total number of families becomes the percentage of families in the parish satisfying this particular condition. Thus, equation (3) may be rewritten as a relation between mean values and percentage variables in the following manner:

$$(4)\quad \overline{D}_j = a_1 + a_2\overline{Y}_j + a_3\overline{A}_j + a_4\overline{F}_j + a_5\overline{H}_j + a_6\overline{N}_j + \overline{U}_j$$

where a bar over a variable denotes a mean or percentage over the $j^{\underline{th}}$ school. Equation (4) is in such a form that multiple regression analysis may be applied and the 160 parishes in the Archdiocese of St. Louis provide the empirical base. (See Appendix for the criteria upon which the selection of the 160 parishes was made.)

Since the means are calculated over parishes which vary significantly in size, a weighting procedure based on the size of each parish is employed to obtain efficient estimators. Since parish size is not a crucial determining factor in this study, it is necessary to standardize to avoid empirical results that reflect largely size differentials. This is quite common in the analysis of economic firms of different size and also the cross-sectional analysis of geographical regions. It is done precisely to avoid the New York-Mississippi phenomena--where differences are generally due to size unless it is controlled. This procedure involves weighting by the square root of each parish's number of families and is described in standard statistical sources. (See E. Malinvand, Statistical Methods of Econometrics, Chicago, Rand McNally, 1966, pp. 254-58.)

Several decision variables are available, and chosen were those to represent decisions at distinct stages in the entire process. The first variable concerns the plans of families with pre-schoolers toward Catholic education. The second and third decision variables are the actual enrollment rates of the family's children in elementary and secondary schools, respectively.

Since there is no "one" particular specification of the decision model that has overwhelming a priori appeal, several different specifications are made to isolate different types of determinants of the Catholic education decision. The first approach was theoretically stated above, the second considers education of the head of household instead of family income as a home variable, and the third and fourth approaches are identical with the first and second, respectively, with a taste factor, average weekly contributions, added to each.

In Table 3, preliminary regression results (regression coefficients and tests of their statistical significance) are presented for the pre-school decision variables, plans of families to send their pre-school children to Catholic elementary school, under four different specifications of the decision equation. Family income has a negative effect upon the plans

TABLE 3. Preliminary Regression Analysis of Family and Environmental Influences Upon Plans of Pre-Schoolers.

Constant	Income (Thousands of $)	Age	Education	Home Ownership	Family Size	Percent Non-White	Contributions	$\bar{R}^2$
* -.406	** -.016	** .017		* .195	.033	.0007		.572
(.229)	(.004)	(.004)		(.094)	(.027)	(.0008)		[36.45]
.103		** .014	** -.040	* .166	.024	.0009		.599
(.235)		(.003)	(.008)	(.090)	(.026)	(.0008)		[40.60]
.202		** .013	** -.047	* .159	.014	.0009	' .015	.601
(.246)		(.004)	(.010)	(.090)	(.027)	(.0008)	(.011)	[35.24]
* -.408	** -.018	** .016		* .198	.029	.0006	.010	.571
(.229)	(.005)	(.004)		(.094)	(.028)	(.0008)	(.012)	[31.27]

( ) Standard error of regression coefficient
[ ] _F_ - statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using _t_ - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

of families with pre-schoolers. This cross-sectional result indicates that increases in family income are associated with fewer plans to attend Catholic schools. Generally, econometric studies show that as income increases a corresponding increase in the quantity is purchased. However, this type of result attained here is not altogether uncommon. Indeed, it indicates that in the urban slums, where family incomes are low, the Catholic schools may be good substitutes for ghetto public schools. However, in the suburbs, where family incomes are high, the public schools are generally quite modern and equipped with the latest educational facilities and are correspondingly good substitutes for Catholic schools.

For each decision variable, age is highly significant and positively related to these decisions. Although the direction of this influence may be rationalized with the economic argument that age is a proxy for experience which is rewarded in the market place with higher wages or salaries, this variable remains highly significant after the influence of income has been taken into account. This result gives some credence to the following interpretation: recent changes in the Catholic Church have polarized the membership into the young and old or those more attuned to innovation and those more traditional, and the significance of the age variable demonstrates that the traditional and older members are more inclined than the young to utilize the Catholic schools. This result reinforces some of the conclusions drawn in the section of this study on enrollment in Catholic schools which projects a decline over the next decade.

Home ownership is a significant factor explaining the pre-school decision variable. The wealthier and the more economically stable the family decision-making unit, the more it is inclined to plan to send its pre-school children to Catholic schools. Family size, percent non-white, and the weekly contributions were not statistically significant factors explaining the decision variable.

In Table 4, preliminary regression results are presented for the elementary school decision variable, the percent of elementary age children actually attending Catholic schools. The family-income and age-of-head-of-household variables are statistically significant and exert their influence in the same direction as for the pre-school decision equation. The interpretations of these variables and their influences stated above also apply in this case. The home-ownership, percent-non-white, and weekly contributions were not statistically significant. The family-size variable is statistically significant and positive in those equations which have the family-income variable included. Thus, the results indicate that large families avail themselves of Catholic educational services more than do small families. Again, large family size may be yet another characteristic of the traditional Catholic family. Large families may also look upon Catholic education as a viable alternative to public education.

In Table 5, preliminary regression results are presented for the secondary-school decision variable, the percent of secondary age

TABLE 4. Preliminary Regression Analysis of Family and Environmental Influences on Elementary Enrollment.

Constant	Income (Thousands of $)	Age	Education	Home Ownership	Family Size	Percent Non-White	Contributions	$\bar{R}^2$
* -.564 (.30)	** -.028 (.005)	** .028 (.005)		.109 (.123)	* .069 (.036)	-.0003 (.001)		.716 [67.87]
.248 (.309)		** .023 (.005)	** -.062 (.010)	.052 (.119)	' .049 (.034)	.0001 (.001)		.731 [77.02]
.360 (.324)		** .022 (.005)	** -.071 (.013)	.045 (.119)	.038 (.035)	.00007 (.001)	.017 (.015)	.732 [62.93]
* -.566 (.30)	** -.032 (.007)	** .027 (.005)		.113 (.123)	* .063 (.036)	-.0004 (.001)	.016 (.016)	.716 [58.31]

( ) Standard error of regression coefficient
[ ] F - statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

TABLE 5. Preliminary Regression Analysis of Family and Environmental Influences Upon Secondary Enrollment.

Constant	Income (Thou-sands of $)	Age	Education	Home Ownership	Family Size	Percent Non-White	Contributions	$\bar{R}^2$
-.220 (.331)	.009' (.006)	.017** (.005)		-.141 (.136)	.023 (.039)	.0004 (.001)		.600 [40.71]
-.387 (.353)		.019** (.005)	.011 (.012)	-.115 (.135)	.034 (.039)	.0003 (.001)		.596 [40.03]
-.222 (.331)	.005 (.008)	.017** (.005)		.137 (.136)	.017 (.040)	.0003 (.001)	.015 (.019)	.60 [34.91]
-.242 (.369)		.017** (.005)	-.00005 (.014)	-.124 (.135)	.020 (.039)	.0003 (.001)	.022' (.017)	.598 [34.73]

( ) Standard error of regression coefficient
[ ] F - statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedcm

* Statistical significance at 5% level, using t - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

school children actually attending Catholic schools. One important consideration must be borne in mind here: the secondary school system of the Catholic Church is much different than the elementary system. The elementary system is based upon parish schools, a very localized institutional arrangement; whereas the secondary schools are regional and generally draw from a number of individual parishes. Furthermore, the payment for secondary educational services is generally more direct with tuition charges larger in dollar amount than the nominal charges imposed upon elementary students. Tuition charges may be a significant explanatory variable, but such data were not available for this study nor would they be meaningful in a cross-sectional analysis since they are constant as of a moment in time and apply to all segments of the market. The age-of-head-of-household variable again was statistically significant, and its interpretation presented above remains the same. The home-ownership, family-size, percent-non-white, and weekly-contribution variables were not statistically significant. The family-income variable notably has a positive, albeit not significant in each case, impact upon the decision variable. This result indicates that higher levels of family income better afford families the opportunity to send their children to a Catholic secondary school. Due to the different characteristics of the secondary educational system and the presence of a more definitive market pricing mechanism, it is not surprising that income would have a positive influence upon the decision variable.

Dr. Kenneth Brown, in his section of this study entitled "Enrollment in Nonpublic Schools," found no discernible relationship between tuition charges and enrollment for the parish schools in the Archdiocese of St. Louis. However, other economic variables do portray an influence upon the decision variables to attend Catholic schools. These decision variables may appropriately be called demand variables, the demand for Catholic education, and the independent variables the determinants of demand. Family characteristics play a significant role not only in the actual demand for Catholic education but also the pre-school plans for attendance at Catholic schools. The behavior of these independent variables is systematic and presents a definite distributional pattern. At the pre-school and elementary stage, family income is negatively related to the decision variable, indicating that the lower income families are more inclined to pursue Catholic education relative to the public school alternative than are the higher income families. The age-of-the-head-of-household is also a significant factor which indicates that younger heads-of-households are more inclined to pursue the public school education alternative than the older heads. All-in-all, the determinants included in the decision model explain between sixty to seventy-five percent of the variation in demand.

IV. SUPPLY-SIDE CONSTRAINTS--THE INFLUENCE OF RATIONING UPON THE DECISION

Catholic school enrollment rates reflect not only the demand characteristics mentioned above but also supply considerations. That is, the suppliers of the educational services are influenctial in determining who actually enrolls in the Catholic schools. Such phenomena are not uncommon in the education arena where it is well-known that results of scholastic achievement tests are used as one criterion for entry in numerous educational institutions. The mechanism that brings the demand and supply factors into equilibrium is not the simple price adjustment mechanism that is typical of most economic goods. First of all, the prevalence of differential tuition rates, and in some cases no direct pricing mechanism, indicates that a considerable amount of price discrimination exists in this market. Furthermore, admission standards of Catholic secondary institutions based on estimates of student potential and academic background are also partially responsible for the adjustment process that leads to market equilibrium. Given these particularly unique characteristics of the Catholic education market, the market-clearing mechanism will be described in some detail before the final formulations of the enrollment function are presented for empirical estimation.

First, it is assumed that the supply of spaces at Catholic schools within a given geographical region, here the region being a parish, constitutes a well-defined submarket for educational services. The supply is distributed over several institutions, each with its unique characteristics making it more or less attractive to Catholic families.

The nature of equilibrium in this submarket of higher education is depicted in Figure 1. In the short run, the supply of available spaces, denoted by SS' in the diagram, can be expected to be very price inelastic. Often, this will be true over the longer term and it has been prevalent with regard to parish schools. The demand for available spaces is assumed to be negatively related to the price of Catholic education. As shown in Figure 1, if the price mechanism alone were allowed to clear the market, prices would rise to P_0, the point of intersection of the demand and supply curves. In point of fact, the typical use of selective admission standards by Catholic elementary and secondary schools implies that prices are usually set below the market clearing level P_0. When prices are set by school administrators at some level P_1 less than P_0, the net result is market disequilibrium, excess demand in this case, which is artificially controlled by a rationing process of selective admission standards and other controls.

The introduction of admission standards and controls implies the existence of a whole family of demand curves for Catholic education--each corresponding to a different degree of stringency in admission standards. In Figure 1, Q represents a quality index of the stringency of admission standards, and the more restrictive the admission standards (corresponding to higher values of Q), the less the demand for Catholic education at any

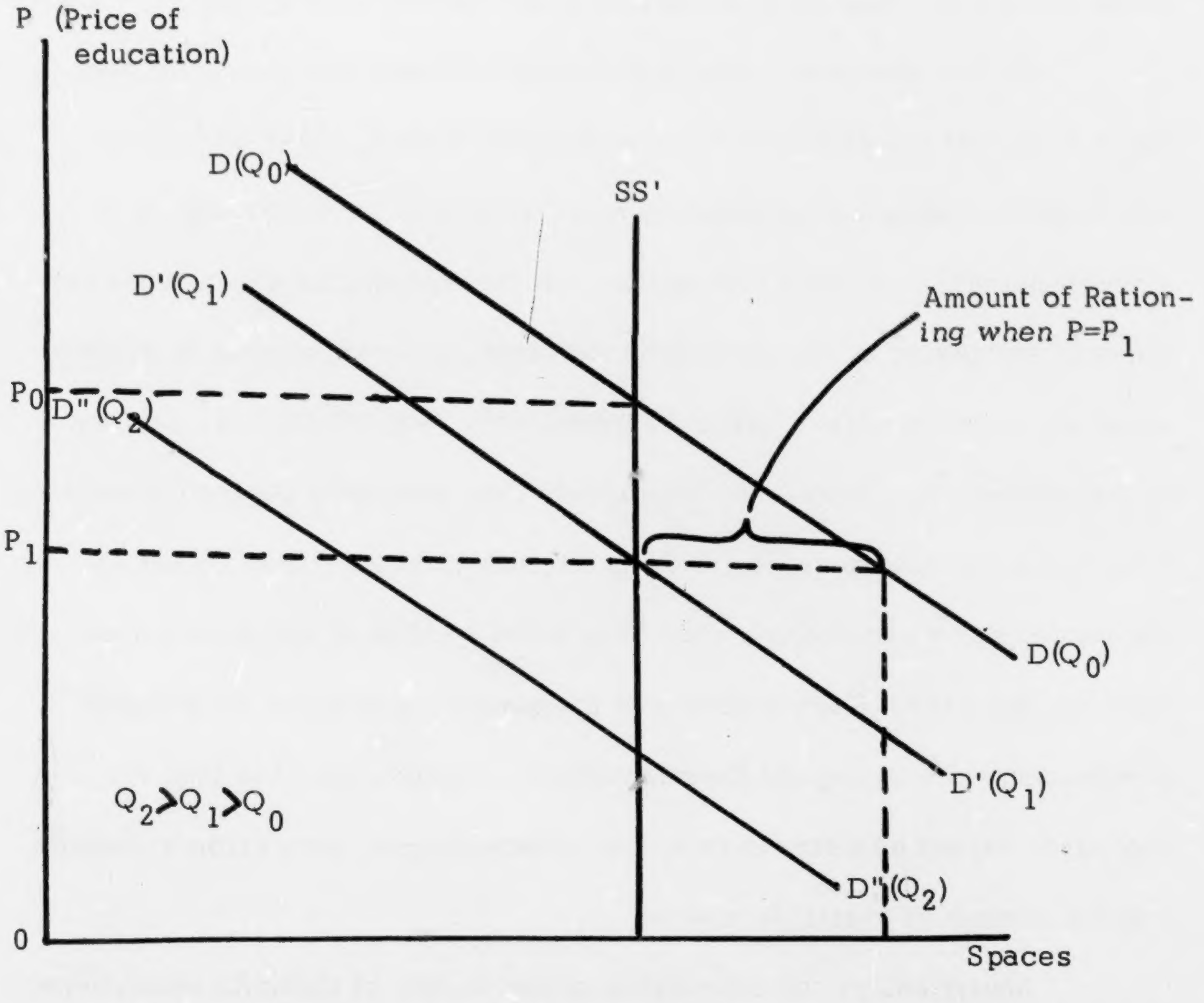
P (Price of education)
D(Q$_0$)
SS'
D'(Q$_1$)
Amount of Rationing when P=P$_1$
P$_0$
D"(Q$_2$)
P$_1$
D(Q$_0$)
D'(Q$_1$)
Q$_2$>Q$_1$>Q$_0$
D"(Q$_2$)
0
Spaces

FIGURE 1

given price. To equate demand and supply at the administered price P_1, admission standards must be set at level Q_1. Moreover, for any price set below P_0, there corresponds some value of Q which will sufficiently ration the excess demand to bring it into equilibrium with supply.

In this analysis, some short-run adjustment will generally take place as actual demand for education becomes known. This adjustment may vary depending on the existing conditions in a particular parish or a geographical region of a high school. If the demand for educational services is excessive at the predetermined price, some tightening in admissions standards may take place. Alternatively, school officials may try to utilize their facilities more intensively than originally planned if conditions permit them to do so. This is equivalent to an outward shift in the supply curve, implying a reduction in the quality of the educational services provided. Such a short-run phenomenon may serve as a signal to administrators to expand their facilities. Indeed, over the long run one might expect adjustment in all variables--prices, admission standards and the number of available spaces.

Analytically, the discussion of the supply of Catholic educational services suggests that rationing occurs in the allocation of spaces and this rationing prevents some students who desire a Catholic education from attaining it. Hence, corresponding to the demand function formulated above, a rationing function may be specified to reflect the effect of admission policies in rationing demand. In distinguishing the effects of these policies on various Catholic populations, particularly relevant is the performance of the group vis-a-vis the standards employed in the particular "market" where their demand is registered. Accordingly, the determinants of rationing are represented in functional form as:

(5) $R_i = g\ (Q_{1i}, Q_{2i}, Q_{3i})$

where R_i is the percent of the eligible population in parish or region i who desire to attend a Catholic school but are unable to obtain admission, Q_{1i} is an index of admission standards employed at Catholic schools, Q_{2i} is an index of the i's population aptitude for Catholic schools as evaluated by education officials, and Q_{3i} is the rationing that occurs because the queue was too long for the available spaces.

The enrollment percentages observed from various populations of eligible students will be positively related to factors increasing the potential demand from each and negatively related to those factors constraining or rationing this demand. In particular, given the way that we have defined the above variables, we have the mathematical relation that

(6) $E = D - R$

where E is the enrollment rate or the percent of the eligible population who actually attend Catholic schools.

Empirical counterparts for the variables influencing demand have been presented above. The financial questionnaire administered to parishioners of the Archdiocese of St. Louis provide a direct measure of the perceived rationing that takes place. (See questions 12 and 13 of financial questionnaire in Appendix.) This variable is now included in the enrollment equation which may take the following specified form:

$$(7)\quad \overline{E}_j = a_1 + a_2\overline{Y}_j + a_3\overline{A}_j + a_4\overline{F}_j + a_5\overline{H}_j + a_6\overline{N}_j - a_7\overline{R}_j + \overline{U}_j \ ,$$

using the demand variables appearing in equation (4) and again applying the aggregation technique. It is now possible to empirically estimate the enrollment or constrained demand relationship, equation (7), using regression analysis. Again, since there is no "one" particular specification of the constrained decision model that has overwhelming a priori appeal, several different specifications are made to isolate different types of determinants of enrollment in Catholic schools. Of particular interest here, besides the rationing variable, is the addition of school variables that reflect in some sense the relative attractiveness of the Catholic schools. One school variable is the percent of teachers who are religious, which may reflect one unique aspect of the Catholic schools; another, is current expenditures per pupil which may be an indicator of the quality of the Catholic school.

In Table 6, regression results (regression coefficients and their statistical significance) are presented for the constrained pre-school decision variable, plans of families to send their pre-school children to Catholic elementary school, under four different specifications of the enrollment equation. The family-income, age, percent-religious-teachers, and

TABLE 6. Regression Analysis of Family, Environmental, School, and Rationing Influences Upon Plans of Pre-Schoolers.

Constant	Income (Thousands of $)	Age	Education	Home Ownership	Family Size	Percent Non-White	Percent Religious	Current Expenditures	Rationing	$\bar{R}^2$
-.135 (.237)	-.010** (.004)	.010** (.004)		.135' (.094)	.024 (.027)	.0004 (.0008)	.002* (.001)		-.253* (.147)	.550 [22.96]
-.028 (.245)	-.010** (.004)	.012** (.004)		.110 (.097)	.019 (.028)	.0007 (.0008)		-.0001 (.0001)	-.245* (.149)	.542 [22.29]
.208 (.239)		.009** (.004)	-.031** (.008)	.118' (.090)	.021 (.025)	.0007 (.0008)	.002* (.001)		-.176 (.145)	.575 [25.39]
.309' (.238)		.011** (.004)	-.032** (.008)	.097 (.092)	.017 (.025)	.0009' (.0007)		-.0001 (.0001)	-.166 (.147)	.570 [24.85]

( ) Standard error of regression coefficient
[ ] F - statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

rationing variables have statistical impact and significantly explain plans for pre-schoolers. The rationing variable does not apply directly to the pre-school situation, but it does represent the amount of rationing that is generally present in a given parish and thus may enter into the formulation of the expectations of families. As expected, the rationing variable exerts a negative force upon the planned enrollment rate, and indeed this is a constraint on the potential demand for Catholic educational services. This result notwithstanding, the family-income and age-of-the-head-of-household variables are highly significant factors which introduce definite distributional implications into the enrollment model. First of all, younger families are not planning to utilize the Catholic schools to the extent that older and perhaps more traditional families are. Secondly, the poorer families take greater advantage of these educational services than do the rich. The poor may find the Catholic schools a superior alternative to the public schools. The latter two variables are indications of what segment of the Catholic population the Catholic school system is appealing to.

The percent-religious-teachers variable is also a significant factor explaining plans for enrollment. The variable has a positive impact upon the dependent variable and it indicates that this aspect of Catholic schools is found to be an attractive aspect of the educational services offerred in Catholic schools. The home-ownership, family-size, percent-non-white, and current-expenditures-per-pupil variables were not statistically significant determinants of planned enrollment of pre-schoolers.

In Table 7, regression results are presented for the elementary school enrollment variable, the percent of elementary age children actually attending Catholic schools. The family-income and age-of-head-of-household variables are statistically significant and exert their influence in the same direction as for the pre-school decision equation. The interpretations of these variables and the influences stated above also apply in this case. Actually, the magnitude of these variables upon the enrollment rates is greater than for the previous decision equation for pre-schoolers. Home ownership, percent non-white, and percent religious teachers are not statistically significant determinants of elementary enrollment.

The current-expenditures-per-pupil variable has a negative and significant impact upon the enrollment. This result is an anomaly since it is a quality factor and should portray a positive influence. However, the pertinent issue that faces each family may not be the quality of the Catholic school but relative quality, i.e., the quality of the Catholic school compared to that of the public school. Such a variable could not be constructed for this study. The rationing variable is statistically significant and has the expected sign. This result reconfirms the notion that admission standards and requirements actually constrain demand to such an extent that a one percent increase in this rationing leads to approximately a 0.8 percent decrease in enrollment. The rationing and demand variables explain eighty percent of the variation in the enrollment rates in Catholic elementary schools.

TABLE 7. Regression Analysis of Family, Environmental, School, and Rationing Influences on Elementary Enrollment.

Constant	Income (thousands)	Age	Education	Home Owner-ship	Family Size	Percent Non-White	Percent Religious	Current Expendi-tures	Rationing	$\bar{R}^2$
.214 (.255)	** -.019 (.005)	** .014 (.004)		-.038 (.101)	* .052 (.029)	-.0005 (.0008)	.001 (.001)		** -.813 (.158)	.786 [66.95]
* .449 (.249)	** -.014 (.005)	** .015 (.004)		-.116 (.098)	.031 (.028)	.00004 (.0008)		** -.0004 (.0001)	** -.746 (.152)	.804 [75.01]
** .728 (.259)		** .011 (.004)	** -.044 (.009)	-.077 (.097)	' .041 (.027)	-.0003 (.0008)	.001 (.001)		** -.733 (.156)	.795 [70.97]
** .865 (.243)		** .013 (.004)	** -.037 (.009)	' -.142 (.094)	.025 (.026)	.0003 (.0008)		** -.0004 (.0001)	** -.666 (.150)	.815 [80.53]

( ) Standard error of regression coefficient

[ ] F - Statistic

$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic

** Statistical significance at 1% level

' Statistical significance at 10% level

In Table 8, regression results are presented for the secondary-school enrollment rate, the percent of secondary age school children actually attending Catholic schools. The prevalence of admission standards in Catholic secondary schools would be one indication that the rationing variable would have a definite impact upon enrollment, and it does. In each specification of the enrollment equation for secondary schools, rationing is significant at the one percent level. Since the institutional arrangements are much different at the secondary level where direct educational charges of tuition are imposed, the economic variables are likely to have a different impact upon the enrollment rates than was the case for the parish-based elementary system. Indeed, this is the situation with the family-income variable which demonstrates a positive and statistically significant influence upon the enrollment rates. This coincides with the general economic phenomenon that as income increases the ecnomic unit is better able to afford the services available. This result is in marked contrast with the elementary school result.

The age variable is again statistically significant and positively related to the enrollment rate. The previous interpretation of the age variable again holds up in this equation. None of the home-ownership, family-size, and percent-non-white variables were significant factors determining secondary enrollment rates.

For each of the three enrollment variables, rationing that takes place in the educational system constrained the demand variables for

TABLE 8. Regression Analysis of Family, Environmental, School, and Rationing Influences on Secondary Enrollment.

Constant	Income	Age	Education	Home Ownership	Family Size	Percent Non-White	Rationing	$\bar{R}^2$
.223 (.337)	.013* (.006)	.009* (.005)		-.164 (.130)	.012 (.038)	.0005 (.001)	-.679** (.175)	.634 [40.28]
-.067 (.348)		.011* (.005)	.021* (.011)	-.133 (.130)	.024 (.037)	.0004 (.001)	-.693** (.178)	.630 [39.65]
.217 (.337)	.012* (.006)	.009* (.005)			-.014 (.032)	.0008 (.001)	-.669** (.175)	.632 [46.54]
-.058 (.348)		.011* (.005)	.021* (.012)		.002 (.030)	.0006 (.001)	-.686** (.178)	.630 [46.06]

( ) Standard error of regression coefficient
[ ] _F_ - Statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using _t_ - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

Catholic education. In total, income and age factors were significant throughout, although the income variable had differential effects upon the enrollment rates. Altogether, the rationing and demand variables do explain a substantial portion of the variation in enrollment rates at each of the three levels, pre-school, elementary and secondary

V. THE MODEL APPLIED TO GEOGRAPHICAL DIVISIONS OF THE ARCHDIOCESE OF ST. LOUIS

The empirical analyses presented above indicate that there are important distributional aspects determining the enrollment rates of Catholic schools. Another distributional dimension is gained if the sample of 160 Archdiocese of St. Louis parishes are disaggregated by geographical characteristics of the area. The natural divisions are three: the City of St. Louis, St. Louis County, and that part of the Archdiocese outside the city and county. Such a breakdown allows closer investigation of the characteristics of those who live in well-defined segments of a metropolitan area. The City of St. Louis has the now typical problems associated with large metropolitan areas, that is, urban decay in the central city, the middle and high income fleeing to the suburbs leaving pockets of poverty behind, and numerous minority groups living in poverty and receiving few and inferior social services. The St. Louis County is characterized by its upper middle class population, generally white, with good social services and modern educational plants for their children. St. Louis County is basically a suburban area. The parishes outside St. Louis County are beyond the suburban area that surrounds the city and it has a general character of rural communities.

The decision variables for these three geographical areas of the Archdiocese of St. Louis paint a definitive demand picture for the Catholic schools. The plans of families with pre-schoolers, enrollment in Catholic elementary schools, and enrollment in Catholic secondary schools are, respectively 54.8, 82.5 and 69.6 percent for St. Louis City, 45.3, 70.9 and 58.1 percent for St. Louis County, and 50.3, 76.7 and 50.0 for areas outside St. Louis County. Thus, the largest demand is forthcoming from the central city where the average family income is the lowest at $8,752. The smallest demand occurs in St. Louis County where average family income is the highest at $12,040. Descriptive statistics for the three geographical regions are reported in Tables 9, 14, and 19, and the simple correlations among the input variables to be included in the decision model are reported in Tables 10, 15, and 20.

It is interesting to note that the general characteristics of the large sample maintain themselves under the disaggregation to the regional level. The percent of pre-school children planning to attend Catholic schools is much smaller than the percent of elementary age children actually attending Catholic schools. Furthermore, Catholic high school enrollment is substantially smaller than elementary school enrollment, approximately twelve percent smaller for the city and county and 26.7 percent smaller for the parishes outside St. Louis County.

The decision model developed in the previous sections is also applicable for the regional breakdowns presented here. This demand model, constrained by supply-side rationing, was empirically estimated by means of multiple regression analysis and the results for the St. Louis City region are in Tables 11,12, and 13; for St. Louis County in Tables 16, 17, and 18; and for the region outside St. Louis County in Tables 21, 22, and 23.

These empirical results are not as statistically significant as the large sample results, but that is to be expected as the sample size diminishes and is fairly small for each of the regions. However, the basic results of the large sample are strongly reinforced by the empirical analysis at the disaggregated level by the three geographical regions.

Average family income has its negative impact upon the decision variables for pre-school and elementary school for each of the regions, and it has a positive impact at the secondary level for each region. Rationing is generally prevalent at all decision levels for the three regions. The age variable also maintained its unique stature in explaining the enrollment patterns. Thus, the interpretations set forth in the previous sections are reconfirmed in this analysis at the regional level. The results again indicate that the demand for Catholic education has very particular distributional aspects, and there are numerous indications that enrollment in Catholic schools will decline rapidly in the next decade because of the current structure of demand for education among Catholic families.

TABLE 9. Dispersion of Variables: St. Louis City.

Variable	Mean	Coefficient of Variation
A. Decision Variables		
1. Percent of Pre-School Children Planning to Attend Catholic Schools	54.8	.301
2. Percent of Elementary Children Attending Catholic Schools	82.5	.260
3. Percent of High School Students Attending Catholic Schools	69.6	.310
B. Input Variables		
1. Family Income	$8,752	.216
2. Family Size	3.03	.246
3. Percent Non-White	12.1	.232
4. Age of Head of Household	49.3 years	.589
5. Education of Head of Household	11.7 years	.095
6. Percent Home-Ownership	63.8	.347
7. Weekly Contributions	$4.14	.276
8. Percent Rationed	8.43	.861
9. Percent Religious Teachers	55.4	.200
10. Current Expenditures per Pupil	500.5	.243

TABLE 10. Simple Correlation of Input Variables: St. Louis City.

	Family Income	Family Size	Percent Non-White	Age of Head	Education of Head	Percent Home Ownership	Weekly Contributions	Percent Rationed	Percent Religious
Family Size	.241								
Percent Non-White	-.0007	-.136							
Age of Head	-.035	-.613	.024						
Education of Head	.815	.057	.188	.064					
Percent Home-Ownership	.294	.635	-.245	-.243	-.053				
Weekly Contributions	.544	-.014	.143	.286	.557	-.025			
Percent Rationed	.082	.127	-.002	-.217	.086	-.069	.209		
Percent Religious Teachers	-.253	.192	.194	-.186	-.313	.101	-.390	-.098	
Current Expenditures	.131	-.225	.454	.105	.273	-.416	.172	.410	.235

TABLE 11. Regression Analysis of Family, School, Rationing and Environmental Influences Upon Plans of Pre-Schoolers: St. Louis City.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Percent Non-White	Rationing	Percent Religious	Current Expenditure	$\bar{R}^2$
.759	-.007	-.006		.345*	-.031	.001				.493
(.661)	(.012)	(.011)		(.162)	(.064)	(.001)				[7.65]
.895'		-.005	-.022	.309*	-.021	.001				.504
(.665)		(.012)	(.021)	(.162)	(.064)	(.001)				[7.94]
.675	-.001	-.007		.284'	-.045	.0004	.109	.003		.294
(.686)	(.013)	(.011)		(.173)	(.065)	(.001)	(.385)	(.002)		[2.98]
.914'	-.006	-.007		.268'	-.037	.0009	.063		-.0008	.247
(.691)	(.014)	(.012)		(.194)	(.067)	(.001)	(.432)		(.0002)	[2.56]

( ) Standard error of regression coefficient

[ ] F - statistic

$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic

** Statistical significance at 1% level

' Statistical significance at 10% level

TABLE 12. Regression Analysis of Family, School, Rationing and Environmental Influences on Elementary Enrollment: St. Louis City.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Percent Non-White	Rationing	Percent Religious	Current Expenditure	$\bar{R}^2$
.542	-.015'	.004		.290*	.019	.00004				.84
(.575)	(.011)	(.009)		(.140)	(.056)	(.0009)				[37.1]
.739		.005	-.0317*	.236'	.0277	.0002				.845
(.577)		(.009)	(.018)	(.141)	(.055)	(.0009)				[38.2]
.783*	-.009	.0004		.065	.021	-.0007	-.534*	.001		.882
(.416)	(.008)	(.0069)		(.105)	(.039)	(.0007)	(.233)	(.001)		[36.4]
.927	-.009	.002		.009	.024	-.0001	-.439*		-.00022'	.883
(.402)	(.008)	(.007)		(.113)	(.039)	(.0007)	(.252)		(.000167)	[36.9]

( ) Standard error of regression coefficient

[ ] *F* - statistic

$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using *t* - statistic

** Statistical significance at 1% level

' Statistical significance at 10% level

TABLE 13. Regression Analysis of Family, School, Rationing and Environmental Influences Upon Secondary Enrollment: St. Louis City.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Percent Non-White	Rationing	$\bar{R}^2$
.064 (.801)	.039** (.015)	.005 (.014)		.120 (.196)	-.010 (.078)	.0005 (.0013)		.721 [18.64)
-.313 (.834)		.005 (.014)	.059* (.026)	.227 (.204)	-.018 (.081)	.0003 (.001)		.708 [17.57]
.375 (.765)	.042 (.014)	.0007 (.013)		.031 (.188)	-.002 (.073)	.0005 (.0012)	-.958** (.406)	.753 [18.8]
-.039 (.789)		-.0002 (.0135)	.068** (.025)	.148 (.193)	-.013 (.075)	-.0003 (.001)	-1.012** (.416)	.744 [18.00]

( ) Standard Error of regression coefficient

[ ] F - Statistic

$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic

** Statistical significance at 1% level

' Statistical significance at 10% level

TABLE 14. Dispersion of Variables: St. Louis County.

Variable	Mean	Coefficient of Variation
A. Decision Variables		
1. Percent of Pre-School Children Planning to Attend Catholic Schools	45.3	.257
2. Percent of Elementary Children Attending Catholic Schools	70.9	.233
3. Percent of High School Students Attending Catholic Schools	58.1	.301
B. Input Variables		
1. Family Income	$12,040	.284
2. Family Size	3.97	.162
3. Percent Non-White	.5	.169
4. Age of Head of Household	44.5 years	.094
5. Education of Head of Household	13.1 years	.095
6. Percent Home-Ownership	90.3	.103
7. Weekly Contributions	5.53	.202
8. Percent Rationed	12.8	.691
9. Percent Religious Teachers	46.7	.233
10. Current Expenditures per Pupil	446.6	.278

TABLE 15. Simple Correlation of Input Variables: St. Louis County.

	Family Income	Family Size	Percent Non-White	Age of Head	Education of Head	Percent Home Ownership	Weekly Contributions	Percent Rationed	Percent Religious
Family Size	.288								
Percent Non-White	-.069	-.089							
Age of Head	-.389	-.021	-.014						
Education of Head	-.385	-.002	-.017	.999					
Percent Home-Ownership	-.384	.012	-.017	.999	.999				
Weekly Contributions	.791	.284	-.045	-.439	-.434	-.432			
Percent Rationed	.186	.229	-.001	-.169	-.161	-.161	.162		
Percent Religious Teachers	-.187	-.219	-.059	.059	.053	.052	-.192	-.093	
Current Expenditures	.256	-.464	.085	.053	.042	.031	-.045	-.083	.170

TABLE 16. Regression Analysis of Family, School, Rationing and Environmental Influences on Pre-School Enrollment: St. Louis County.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Percent Non-White	Rationing	Percent Religious	Current Expenditure	$\bar{R}^2$
-.525*	-.012**	.015**		.478**	-.0003	-.004*				.51
(.263)	(.005)	(.004)		(.182)	(.035)	(.002)				[16.08]
-.02		.0122**	-.033**	.410**	-.006	-.003'				.528
(.274)		(.003)	(.010)	(.179)	(.033)	(.002)				[17.2]
.598**	-.003	-.003		.102	-.029	-.003	-.363*	.001		.385
(.185)	(.005)	(.003)		(.144)	(.038)	(.002)	(.184)	(.001)		[7.34]
.747**	-.000	-.0006		.027	-.041	-.003	-.379*		-.0002'	.389
(.184)	(.005)	(.004)		(.146)	(.039)	(.002)	(.184)		(.0001)	[7.47]

( ) Standard error of regression coefficient

[ ] F - Statistic

$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic

** Statistical significance at 1% level

' Statistical significance at 10% level

TABLE 17. Regression Analysis of Family, School, Rationing and Environmental Influences on Elementary Enrollment: St. Louis County.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Percent Non-White	Rationing	Percent Religious	Current Expenditure	$\bar{R}^2$
' -.543	** -.025	** .027		.009	' .079	-.003				.566
(.401)	(.007)	(.006)		(.278)	(.053)	(.004)				[19.9]
.472		** .021	** -.066	-.126	' .067	.001				.592
(.414)		(.006)	(.015)	(.271)	(.051)	(.004)				[22.06]
** .773	* -.013	.005		-.178	.028	-.002	** -.864	.0007		.579
(.239)	(.006)	(.005)		(.187)	(.048)	(.003)	(.239)	(.0015)		[14.9]
** 1.08	-.003	* .009		* -.362	-.013	-.002	** -.903		** -.0007	.655
(.216)	(.006)	(.005)		(.173)	(.045)	(.002)	(.216)		(.0001)	[20.2]

( ) Standard error of regression coefficient
[ ] F - statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

TABLE 18. Regression Analysis of Family, School, Rationing and Environmental Influences On Secondary Enrollment: St. Louis County.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Percent Non-White	Rationing	$\bar{R}^2$
-.084	.013	*.0105		.047	.0007	-.005		.3118
(.389)	(.007)	(.006)		(.270)	(.052)	(.004)		[7.57]
-.424		**.013	.017	.091	.019	-.005		.291
(.420)		(.005)	(.015)	(.274)	(.051)	(.004)		[7.01]
.250	**.016	.004		.104	-.016	-.004	**-.622	.368
(.391)	(.007)	(.006)		(.259)	(.050)	(.003)	(.219)	[8.22]
-.248		'.008	*.029	.172	.003	'-.005	**-.637	.349
(.408)		(.006)	(.015)	(.265)	(.049)	(.003)	(.225)	[7.67]

( ) Standard error of regression coefficient
[ ] F - statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

TABLE 19. Dispersion of Variables: Outside St. Louis County.

Variable	Mean	Coefficient of Variation
A. Decision Variables		
1. Percent of Pre-School Children Planning to Attend Catholic Schools	50.3	.207
2. Percent of Elementary Children Attending Catholic Schools	76.7	.242
3. Percent of High School Students Attending Catholic Schools	50.0	.492
B. Input Variables		
1. Family Income	$9,282	.119
2. Family Size	4.09	.155
3. Percent Non-White	--	--
4. Age of Head of Household	43.7 years	.075
5. Education of Head of Household	11.0 years	.077
6. Percent Home-Ownership	87.5	.102
7. Weekly Contributions	$5.00	.233
8. Percent Rationed	9.5	1.10
9. Percent Religious Teachers	50.1	.339
10. Current Expenditures per Pupil	474.7	.269

TABLE 20. Simple Correlation of Input Variables: Outside St. Louis County.

	Family Income	Family Size	Age of Head	Edu-cation of Head	Percent Home Owner-ship	Weekly Contri-butions	Percent Rationed	Percent Religious
Family Size	.529							
Age of Head	-.411	-.664						
Education of Head	.556	.183	-.236					
Percent Home-Ownership	.169	.328	-.185	-.114				
Weekly Contributions	.381	.327	-.019	.275	-.218			
Percent Rationed	-.231	.073	-.193	.223	-.356	.051		
Percent Religious Teachers	-.513	-.234	.182	-.459	.033	-.479	-.155	
Current Expenditures	-.606	-.596	.313	-.341	-.376	-.396	.128	.399

TABLE 21. Regression Analysis of Family, School, Rationing and Environmental Influences on Pre-School Enrollment: Outside St. Louis County.

Constant	Income (thousands)	Age	Edu-cation	Home Ownership	Family Size	Rationing	Percent Religious	Current Expendi-ture	$\bar{R}^2$
-.714 (.683)	-.004 (.028)	** .024 (.010)		-.359 (.449)	* .120 (.062)				.548 [8.04]
.307 (.796)		* .019 (.009)	* -.071 (.034)	-.342 (.404)	* .114 (.055)				.617 [10.3]
.297 (.831)	-.023 (.035)	.008 (.010)		' -.567 (.401)	** .146 (.054)	' -.535 (.362)	.0005 (.002)		.704 [8.81]
.620 (.933)	-.035 (.034)	.006 (.010)		' -.630 (.396)	** .142 (.055)	* -.579 (.331)		-.0001 (.0002)	.705 [8.86]

( ) Standard error of regression coefficient

[ ] F - statistic

$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic

** Statistical significance at 1% level

' Statistical significance at 10% level

TABLE 22. Regression Analysis of Family, School, Rationing and Environmental Influences on Elementary Enrollment: Outside St. Louis County.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Rationing	Percent Religious	Current Expenditures	$\bar{R}^2$
-1.429	-.019	.032*		.815	.055				.496
(1.198)	(.049)	(.017)		(.787)	(.110)				[6.70]
.153		.024'	-.114*	.795	.036				.557
(1.42)		(.017)	(.061)	(.721)	(.099)				[8.28]
.265	-.010	-.007		.875*	.029	-.819*	.002		.836
(1.02)	(.043)	(.012)		(.495)	(.066)	(.447)	(.002)		[17.7]
1.06	-.045	-.010		.699'	.033	-.993**		-.0002	.829
(1.17)	(.043)	(.012)		(.499)	(.069)	(.418)		(.0002)	[16.9]

( ) Standard error of regression coefficient

[ ] F - statistic

$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic

** Statistical significance at 1% level

' Statistical significance at 10% level

TABLE 23. Regression Analysis of Family, School, Rationing and Environmental Influences on Secondary Enrollment: Outside St. Louis County.

Constant	Income (thousands)	Age	Education	Home Ownership	Family Size	Rationing	$\bar{R}^2$
.002 (1.197)	.035 (.049)	.008 (.017)		-.263 (.786)	.024 (.110)		.500 [6.80]
-.138 (1.53)		.009 (.018)	.018 (.066)	.148 (.775)	.048 (.106)		.491 [6.59]
1.33 (1.38)	.024 (.047)	-.012 (.021)		-.455 (.763)	.004 (.106)	-.688* (.399)	.538 [6.63]
.893 (1.53)		-.012 (.021)	.051 (.065)	-.429 (.747)	.018 (.101)	-.796* (.405)	.545 [6.79]

( ) Standard error of regression coefficient
[ ] F - statistic
$\bar{R}^2$ Coefficient of determination adjusted for degrees of freedom

* Statistical significance at 5% level, using t - statistic
** Statistical significance at 1% level
' Statistical significance at 10% level

VI. CONCLUSION

This study of the decision-making process that precedes the enrollment of children in Catholic schools is analyzed with the data available from the Archdiocese of St. Louis. Since the great majority of Catholic school systems are located in large metropolitan areas, it is likely that the results from this study reflect quite accurately the decisions facing the Catholic families of the United States concerning the education of their children. The major thrust of the empirical results is that the Catholic school system does not service all segments of the Catholic community proportionately. In fact, it appears to be the middle- to lower-income families who find the Catholic school system to be a good substitute for public (predominately) or other private education.

Several empirical results of this study reinforce the rather sharp decline in Catholic school enrollment projected in Professor Brown's paper on enrollments. Those families with pre-school children are planning to attend Catholic schools in much fewer numbers than those families with children already enrolled in Catholic elementary schools. Furthermore, older, and perhaps more traditional, families are more inclined to take advantage of the Catholic educational services. Thus, younger families are searching out and utilizing other forms of educational services. Over the next decade, this result would indicate that enrollment in Catholic elementary schools would decline as these younger families begin to send their children to school. The identical influence of age-of-head-of-household variable upon enrollment rates occurs at Catholic elementary and secondary school levels. The general conclusion to be drawn from this analysis is a decline in Catholic school enrollment in the near future.

Another result of the plans of families with pre-schoolers and the enrollment rates in elementary schools is that family income is negatively related to such decisions. This indicates that middle- and upper-income families take advantage of better educational facilities and services available to them through the public school system. This is generally true in the suburbs where public school systems are of the high quality. The low- and middle-income families, however, still find the Catholic schools to be of superior quality compared to the alternative of, say a ghetto or central city public school. At the secondary level, family income is positively related to enrollment rates and this is an indication that it is the wealthier families that are able to afford the tuition charges for those educational services.

Finally, a number of potential students desiring to attend Catholic schools are denied spaces by administrators on several possible bases. There may be a lack of space within a given parish school, in which case a gueue is formed and a limited number from the queue are chosen. Or, there may be admission requirements at the schools; and this is especially true for the secondary level. These rationing devices appear to be prevalent in the Archdiocese of St. Louis and are statistically significant in most of the empirical analyses. This result has definite policy implications since admission is not available to all comers under the current structure. However, it is possible to change the existing structure and design public aid to circumvent the problem.

IX. SOME COMMENTS ON PUBLIC AID TO PRIVATE SCHOOLS

Arthur J. Corazzini

SOME COMMENTS ON PUBLIC AID TO PRIVATE SCHOOLS

Ever since the popularization of the economic concept of human capital, the general public has been eager to treat elementary and secondary education as an investment good, with the size of the investment measured by the number of years of schooling completed and levels of current expenditures. Many non-economists have come to talk about the "returns" to the investment in human capital and the social benefits of continued investment in education, in quite familiar terms. Perhaps because of this popularization, the very real distinctions between investment and consumption benefits have tended to be blurred. From the neo-classical economist's vantage point, investment in education results in increased productivity of the work force. Increased productivity is measured by increases in lifetime income attributable to corresponding increases in the amount and quality of education and these productivity changes are the direct social benefits to be maximized by the optimal level of investment. There are, of course, indirect social benefits which, working again through the productivity nexus, result in a more stable work force and thus reduce crime and welfare costs.

The neo-classical approach to human capital concepts says nothing about where the education should be produced, or how its production should take place. It does indicate that if a society underinvests in its own work force it will suffer economic losses in terms of the rate of growth of output.

Modern society and, in particular, modern day government, has placed such importance on this link between education and worker productivity that it has not left the production of education to the private sector, fearing that the quantity forthcoming would be insufficient to achieve broader economic objectives. Accordingly, state and local governments have written universal education to specific ages into law. Moreover, the public sector has taken on primary responsibility for production of this investment good, so that the form of the educational production function is specified by the government. By controlling the means and methods of production, as well as setting the rules for who shall attend and for how long, the government hopes to assure efficient production of this investment good.

Skeptics have on a number of occasions sharply questioned the public sector's conception of educational benefits. That is, they have raised questions as to whether the public sector destroys, in its eagerness to produce gains in worker productivity, many of the most valuable private consumption benefits that education should produce. They ask whether the public system is perhaps designed "to produce well-behaved citizens and workers who will smoothly fit into the existing order of things regardless of the costs to themselves in terms of emotional development, personal satisfaction in life, and the ability to develop creative human relationships...." If the production goals are indeed related to maintaining the socio-economic status quo, many critics would insist it doesn't make very much sense to worry about the efficiency with which such goals are pursued. Nonetheless, despite criticism of this sort and very little consistent empirical evidence regarding the nature of the relationship between the system's inputs and outputs, production of this public good remains a state monopoly.

Off to one side of the public system, but very much influenced by that system, exist smaller, private, usually religious, school systems which can produce private consumption benefits which differ in part from those of the state monopoly. The debate as to whether tax dollars should be allocated to such schools in order to prevent their closing should really be divided into two parts. There are questions concerning the effectiveness of a particular subsidy assuming that the goal is preservation of the system of private schools. But there are also a separate set of questions relating to the political appropriateness of the subsidies. The objections raised regarding the political appropriateness focus on the nature of the private consumption benefits produced in these alternatives to the public schools. Some argue that state subsidies in whatever form cannot fail to provide general support for the religion or religious order sponsoring the school. Others are upset by the possibility that subsidies will result in the creation of many new private schools with religious or political affiliations, and some of the possible affiliations are not very appealing to those raising objections (e.g., Black Muslims, Black Panthers). Note that many of these same people would like vouchers to allow--indeed, encourage--all black schools. In such schools, however, inputs could be carefully specified by state authorities. Finally, there are those who not only worry about the potentially politically unpleasant consumption benefits resulting from subsidization, but also about the feedback on worker productivity. That is to say, new forms of schools may not necessarily establish among their pupils the optimal attitudes regarding the work-leisure trade-off thus affecting the stream of potential worker productivity gains.

Beyond these kinds of political objections there are also questions of constitutional law. However, most constitutional law questions become relevant only if society is willing to subsidize forms of education outside the public sector, which will indeed produce some private benefits not determined by the state. It is interesting to note that almost no questions are raised as to the ability of these alternative schools to raise worker productivity. The constitutional law questions are then concerned with the form of that aid. As we will see, recent decisions indicate that the most efficient forms of aid may not be appropriate under the law and those appropriate may be inefficient.

There have been a large number of different aid to private school plans proposed at various times. Major forms of aid are: (1) tax rebate programs, (2) purchase-of-service contracts, (3) tuition grants or vouchers, and (4) per-pupil state grant-in-aid formulas for both public and private schools.

To date, the legal decisions regarding the appropriateness of aid to private schools have not complemented the tentative conclusions reached with regard to the effectiveness of particular aid forms. For example, the Supreme Court has ruled transportation subsidies legal, but the amount of funds forthcoming via this type of aid can hardly be expected to prevent school closings. In contrast, the purchase of secular services contracts, which could conceivably have been of sufficient size to maintain parochial school operations, have been declared unconstitutional. The problems of private school aid are deep-rooted and will not lend themselves to easy solution. Nonetheless, it may prove of value briefly to review some of the economic issues which are sure to re-emerge in future discussions. Purchase-of-service contracts, as we mentioned above, have been declared unconstitutional. The by now well-known criteria of the Supreme Court for evaluating constitutionality rest in the answers to four key questions:

First, does the Act reflect a secular legislative purpose?

> Second, is the primary effect of the Act to advance or inhibit religion?
>
> Third, does the administration of the Act foster an excessive government entanglement with religion?
>
> Fourth, does the implementation of the Act inhibit the free exercise of religion?

The purchase of services contracts were judged to violate the entanglement provisions of the law. It would appear that grant-in-aid provisions such as that proposed for New Jersey would fall into the entanglement category. The Court wrote in Waltz v. Tax Commission and repeated in Lemon v. Kurtzman:

> Obviously a direct money subsidy would be a relationship pregnant with involvement and, as with most governmental grant programs, could encompass sustained and detailed administrative relationships for enforcement of statutory or administrative standards. (Waltz v. Tax Commission; Lemon v. Kurtzman, 16.)

On the other hand, vouchers or tax-rebate programs would not appear to violate the constitutional provisions insofar as they involve direct aid to the student and/or his parents. While the constitutionality of a tax credit program may not be in question, the economic rationale is doubtful. The rationale appears to be some notion that in sending children to private school the individual saves the state resource costs. However, the marginal costs of absorbing one more child into the public system would in almost all circumstances approach zero. Only when large numbers of children move from private to public systems would public sector resource costs increase considerably. A more appropriate tax credit might be granted directly to the private school for providing an alternative to the public system. The trouble with this suggestion is that the church and private schools are already tax-exempt! Should such a plan be adopted at the state level, the private schools would benefit insofar as the price of the schooling would be lower and a greater demand might be forthcoming. However, although this would seem to be the case on theoretical grounds, empirical estimates reveal that the price elasticity of demand for private schooling is not very large. Before turning to our discussion of voucher plans, it would seem appropriate to consider some of the various schemes in addition to the major forms which have been offered as aids to private schools.

The President's Commission lists no less than 24 types of school aid. Not all of these deserve extensive comment. Such aid forms as Administrative Services Reimbursement, Special Grants for Equipment, Education Support Services, Driver Education, Transportation, Health Services, Aid to Handicapped Children, Textbook Aid, Experimentation and Innovation Aid, Nutrition Aid, are either analytically uninteresting or quantitatively unimportant or both. Health Aid and Driver Education are good examples of services which private schools do not always provide and which become important in the eyes of public decision makers. These programs make the private schools more like the public schools. Such programs do not necessarily influence consumer choice of schools, do not aid the schools financially, and could easily be provided without recourse to grant-in-aid schemes. For example, a more equitable distribution of medical services would be through community health clinics or any of a dozen types of public-health programs which could provide the same services as are now provided via subsidies to private schools. Indeed it is hard to see how such plans which add to the functions of the private school, functions which make them more like public schools, are really aid at all. They do not make it financially easier for the private schools to carry out their self-determined educational tasks and are aid only the sense that such private schools would be incomplete "schools" without the subsidized programs. In a secondary sense, we might argue that parents would withdraw their children in the absence of such programs so that the programs are a general aid in maintaining the private school enrollment. However, this argument contains a hypothesis which has not been tested empirically.

Special grants for equipment or textbooks are, as we have already mentioned, quantitatively unimportant insofar as some 70-80 percent of current expenditures are for labor, not capital inputs.

Capital development loans are potentially useful to the private schools. However, the recent Supreme Court decision regarding the

Higher Education Facilities Act (Tilton v. Richardson) would appear to raise questions regarding the constitutionality of such loans. Specifically, the Court found the act constitutional except for the portion providing for a 20-year limitation in the religious use of the facilities constructed with federal funds. The Court ruled in effect that such buildings could not be used for religious purposes at all. Hence, it would appear that private, parochial schools would not be eligible for low-interest loans for capital construction at the elementary and secondary school level, since these buildings would appear to serve both religious and secular educational purposes.

Dual enrollment plans are still another form of aid which is not aid in the conventional sense of the term. The plans, in general, do not necessarily make private operations cheaper from the private vantage point. Rather, they add a range of course options not available at the private school. The fact that private school children can journey to the public facilities and enroll in home economics or industrial arts courses may induce some to remain at the private school who would otherwise have dropped into the public sector. For those so categorized, the dual enrollment plan would seem to be efficient for the public sector insofar as the marginal costs to the public sector of educating these children a few hours a week would be less than the marginal costs should the private system close entirely. Thus, if there is to be an immediate financial benefit from this type of aid program, it is the public, not the private, sector which benefits. In the long run, a case could be made for the benefits being more equally divided, if, for example, the private schools are saved the resource costs of instituting courses they had fully intended to install in their curricula. As for the students involved, we would be hard pressed to assess the benefits of individual courses at the elementary or secondary level.

Public school teachers in non-public schools is an interesting arrangement, not unlike a dual enrollment plan. However, whereas the dual enrollment plan would appear to add course offerings, the public school teacher plan would appear to substitute public for private school teachers in secular subject areas already taught at the school. If so, the plan could circumvent the entanglement of church and state problem encountered in purchase of service contracts, while relieving the private schools of a financial burden. Again, from the public vantage point, the marginal resource costs of hiring extra public school teachers to teach in private schools would be less than the marginal costs of absorbing an entire private school into the public system. If it is true, however, that the parochial schools attempt to carry the religious message of the school into all classrooms, those directing the parochial system may not be receptive to substantial numbers of secular school teachers instructing their charges. Moreover, it would remain to be seen just how much Catholic parents would pay or contribute for the privilege of having their children attend parochial schools no longer run or directed entirely by parochial personnel. If, on the other hand, parochial school personnel are allowed jurisdiction over the public school teacher's classroom content, the advantages of church and state separation are lost.

The nonpublic school facility-lease program is yet another aid form which cannot be quantitatively important to the parochial or private schools. To be sure, they receive monies for classroom space rented to public authorities. The excess capacity is thus utilized in a way which allows the public authorities to avoid the capital costs of new construction. In order to maximize rental income the parochial schools would have to minimize their own enrollment, i.e., close their schools and rent facilities to the public sector. Thus we might categorize this aid form as inflexible at best, with increases in aid tied to decreases in private enrollments. However, this aid form, along with the dual enrollment and public school teacher in private school plans, does offer the private schools an opportunity to relinquish costly portions of their current school programs to the public sector and then concentrate on providing special educational benefits.

The Voucher Plans

Educational voucher plans, designed to aid only nonpublic schools as we presently understand that term, contain a number of pitfalls. The simplest plans, wherein governments issue vouchers to parents, and schools redeem these vouchers at government offices, can run into direct conflict with civil rights legislation. Such voucher plans can encourage the establishment of private, segregated schools which are set up to avoid the public school desegregation rulings. Once safeguards are introduced to assure that the vouchers are not used to establish racially-segregated facilities, a very real question arises as to whether the parochial schools in particular would be willing to operate under the type of rules which have been prepared. Specifically, the work of C. Jencks et al. is the best and most comprehensive discussion of voucher plans. In that analysis, Jencks distinguishes between public and private schools, on the basis of how they are run rather than who runs them. For Jencks, a school is "public" if it were open to everyone on a non-discriminatory basis, if it charged no tuition, and if it provided full information about itself to anyone interested. A "private" school would be one which did just the opposite in these three respects. Jencks would not allocate public monies to private schools. Although there is considerable controversy over the extent to which schools would have to be screened regarding the nature of their inputs and educational outputs in order to be eligible to redeem vouchers, most present-day private parochial schools would appear to fall outside this definition of public in any regard. The private and parochial schools have traditionally screened applicants for admission rather carefully. For some private schools, family name probably plays an important role in the admission process and such schools go out of their way not to reveal very much about themselves to the general public. For parochial schools, non-Catholics are certainly not sought out for enrollment. Furthermore, the evidence seems to indicate that blacks are not actively recruited. Moreover, the Catholics have traditionally applied their own set of academic admissions requirements which often results in slower children being excluded and discipline problems being expelled. Would the private and parochial schools be willing to change their operating procedures in order to redeem vouchers? It is our opinion that such schools would be extremely reluctant to institute such changes. Nonetheless, the voucher plans contain much promise for reforming the educational system. Only if the state monopoly is broken will real innovation and choice be available in the elementary and secondary school system.

X. SAFEGUARDING THE PUBLIC INTEREST

Louis R. Gary

CONTENTS

I. Introduction 462

II. Legislation for Equal Opportunity 463

III. Educational Goals 476

IV. Pluralism 499

I. INTRODUCTION

The public policy implications of aid to nonpublic schools can best be assessed at the nexus of administration and impact, the state and local level. This is true even if the funds provided come from the federal level and the final oversight is at the federal level.

New York State with its massive nonpublic school enrollment of 841,000 and its major urban education problems centering around the poor, and racial/ethnic minority groups is used for illustration. In education unlike politics it is not as "Maine goes so goes the nation". The light house states of New York and California must be considered. Federal legislation which cannot cope with the core educational problems of these states is unlikely to be influential in the nonpublic sector whose enrollments are more concentrated in urban areas than the public schools. If the federal government simply attaches as a condition of aid adherence to Title VI of the Civil Rights Act, it will essentially be relying upon the states except in the instances of the most blatant racial/ethnic discrimination involved in state (including local school district) action or in nonpublic school action.

---

*This paper is provided for submission to the White House Panel on Nonpublic Education. The paper represents a revision of Chapter IV of the report copyrighted by Implications Research, Inc., entitled, The Collapse of Nonpublic Education: Rumor or Reality? Louis R. Gary, et. al.

II. LEGISLATION FOR EQUAL OPPORTUNITY

There has been a growing belief since mid-century, encouraged by U.S. Supreme Court rulings, that the protection of the public interest in education requires active promotion of educational goals. These goals include social justice; specifically the guarantee of equal opportunity. These educational goals have not yet been attained in either the public or the nonpublic sector. The conditions attached to nonpublic school aid can be used as an indicator of the extent to which government has actively promoted equal opportunity in nonpublic education.

New York anticipated by a half century the historic Brown v. Topeka decision when it passed Section 3201 of the Education Law prohibiting discrimination in education based on race, color or creed. Nevertheless, there is greater racial isolation in public schools today than there was a decade ago. If we presume that states will take an even more aggressive stance in promoting equal opportunity in public schools over this decade, then it is difficult to imagine a decision to subsidize nonpublic schools without a similar commitment. To do otherwise would encourage parents who wished to evade the social justice requirements of the public schools to seek a haven in the nonpublic schools. Clearly it would be intolerable for government to allow with the one hand that which it condemns with the other.

A report to the New York Commission on Education has noted: "What would be merely an inoffensive personal choice of the wealthy when secured with private funds would have become an invidious privilege bestowed by government. Isolation and excellence would be purchased by the rich with a state subsidy."[1]

The most recent New York legislation, Secular Educational Services Act, provides a kind of endorsement of the equal opportunity goals particularly common in northern states, but on close inspection it is apparent that the present State legislation in fact fails to take an active stance in support of the accomplishment of these goals. SESA included only the following legal boiler place clause: "Qualifying school shall mean any nonprofit elementary or secondary school . . . which is in compliance with section three hundred thirteen of the education law."[2]

Section 313 of the Education Law states:

> Discrimination in admission of applicants to educational institutions. Declaration of policy. It is hereby declared to be the policy of the state that the American ideal of equality of opportunity requires that students, otherwise qualified, be admitted to educational institutions without regard to race, color, religion, creed or national origin, except that, with regard to religious or denominational educational institutions, students, otherwise qualified, shall have the equal opportunity to attend therein without discrimination because of race, color or national origin. It is a fundamental American right for members of various religious faiths to establish and maintain educational institutions exclusively or primarily for students of their own religious faith or to effectuate the religious principles in

> furtherance of which they are maintained. Nothing herein contained shall impair or abridge that right.

A similar nondiscrimination provision, including the religious exception, holds for the hiring of teachers in nonpublic schools.

Less obvious, but more telling than Section 313's limitations in the area of religious discrimination is the relative failure to provide administrative mechanisms to enforce and promote the positive declarations of this section. In contrast to the several administrative bodies charged with the promotion of these principles in the area of public education, there is a paucity of comparably charged bodies in regard to nonpublic education. Thus the State's attitude toward equal opportunity, while relatively active with regard to public schools, is indeed passive with regard to nonpublic schools.

The recent U.S. Supreme Court rulings against direct State payments to nonpublic schools for the purchase of secular teaching services have made voucher plans and tuition grants prominent among current approaches to State aid. Therefore the relationship of voucher plans and tuition grant proposals to the issue of equal opportunity is crucial.

Aid without conditions to assure compliance with public policy in regard to equal opportunity is condemned by most advocates of voucher plans, with the notable exception of Milton Friedman. Vouchers are favored because they are seen as a vehicle through which poor families can have equal accessibility to educational opportunities. Tuition grants to parents or their equivalent script in the form of vouchers can be presented by parents to a school and be redeemed by the school for cash from the State. Such a mechanism could provide substantial funds to hard pressed nonpublic schools. Moreover, the voucher aid approach is purported by some to be Constitutional, although in fact the issue has not yet been tested in the courts.

Vouchers or tuition grants have been proposed in a multitude of patterns ranging from grants with virtually no conditions attached to those with intricate balancing conditions for the achievement of greater social justice. Robert Lekachman notes:

> Vouchers come in two basic styles, conservative.. and liberal, with each displaying rather different advantages and defects. Friedman's proposal is dazzlingly simple. He wishes to take the monies now devoted to financing public schools and use them to support free choice by parents. For each school-age child, parents would be issued a voucher. They would assign the voucher to the school of their choice -- public, private, parochial, profit-making, or altruistic in organization. Schools would cash in the vouchers at the public treasury at rates publicly established. Parents could freely shop for the school they felt suited their child best, and alert entrepreneurs would widen the choices available by founding new schools better adjusted to the tastes of prospective customers.[3]

The range of voucher plan models is vast. Christopher Jencks in his study describes 11 variations on vouchers. Robert Lekachman summarizes four as follows:

> Unregulated compensatory model. Each voucher issued to the parent of a poor child could be cashed in at the school of the parent's choice for more dollars than a voucher issued to a prosperous family. Hence the compensatory in the label. But each school would be allowed to charge whatever tuition it wanted.
>
> Compulsory private scholarship model. Again, schools would be free to set tuition, but only on the condition that they offer scholarships to poor children. The size of the scholarships, the conditions of their tenure, and the mode of selection would be among the matters controlled by the EVA [Educational Voucher Authority].
>
> Effort vouchers. This is the brainchild of Professor John Coons. Parents would be free to choose among schools whose per pupil costs were anything from present public school levels to several times that figure. How much parents paid would depend upon the school's expenditure level and the parent's income. For example, in the case of a family whose income was $5,000, EVA might stipulate a 1.2 percent ($60) assessment for enrolling a child in a school spending $1,000 per pupil. The amount might rise to 1.5 percent of income ($75) if the chosen school expended $1,200 per child.
>
> Achievement vouchers. This plan focuses on accountability. The amounts schools received per voucher would be related to the progress made by each child during the school year.[4]

Jencks' choice is a regulated compensatory voucher which set about redefining the term nonpublic:

> In order to understand the proposals made in this report, the reader must begin by reconsidering traditional definitions of the terms "public" and "private" in education. Since the nineteenth century we have classified schools as "public" if they were owned and operated by a governmental body. We go right on calling colleges "public" even when they charge tuition that many people cannot afford. We also call academically exclusive high schools "public" although they have

> admissions requirements that only a handful of students can meet. And we call whole school systems "public" even though they refuse to give anyone information about what they are doing, how well they are doing it, and whether children are getting what their parents want. Conversely, we have always called schools "private" if they were owned and operated by private organizations. We have gone on calling these schools "private" even when, as sometimes happens, they are open to every applicant on a non-discriminatory basis, charge no tuition, and make whatever information they have about themselves available to anyone who asks.[5]

This lengthy quotation has been presented here to illustrate the variety of mechanisms that might be applied to achieve equality of opportunity. The basic conditions are not unique to vouchers. They involve fundamental State promotion of social justice. If the State didnot wish to exhibit a passive attitude toward equal opportunity in the nonpublic sector, conditions of aid could have been attached to SESA or the Mandated Services Act. There are five critical areas of State action for equal opportunity: open admission, quality control, informed parents, economic barriers and public accountability.

Open Admission

Although selectivity among nonpublic schools, particularly at the elementary level, is less pronounced than is generally believed, especially in the sectarian school groups, open admission is not a universal standard and is not mandated as a condition for State aid.

Since possibilities for subtle selectivity remain, admission-expulsion conditions should be considered. Most bills proposed have no regulation of this type beyond requiring compliance with Title VI of the Civil Rights Act. Jencks proposes that a school receiving aid:

- Accept any applicant so long as it had vacant places.
- If it has more applicants than places, fill at least half of these by picking applicants randomly, and fill the other half in such a way as not to discriminate against ethnic minorities.
- Accept uniform standards regarding suspension and expulsion of students [due to process].[6]

This is not a policy of assigned enrollment in which public authorities would decide which students must attend each school. The conditions preserve freedom of choice for both the school and the student. They help avoid danger of segregation, whether based on learning aptitude, or socio-economic factors. Such conditions would require a change in Section 313 of the New York Education Law to eliminate the right of sectarian schools to give preference in admission to members of their denominations.

Staff would be affected as well as students. With potential teacher surpluses, the right of denominational schools to deny a secular subject teaching position to a member not of their denomination could create a genuine selective economic hardship on applicants, while the salaries for those positions were subsidized by the State.

Thus, the government might, as a condition for aid, hire teachers of secular subjects on a preferential basis according to religion.

Quality Control

The State requires that the education provided in nonpublic schools be equivalent to that in public schools. Although the power of inspection exists, it is rarely used by the State. Frequently, when conditions on aid have been proposed in other States, it has been suggested that public school curriculum and teacher certification requirements be imposed on nonpublic schools eligible for aid. This would seem unduly restrictive. It would certainly severely limit the potential growth of pluralism in education.

Rather than measuring input by curriculum and certification requirements, measurements which are in any event grossly inadequate, output measures of general performance along the lines of expanded State-wide PEP tests might be less restrictive and more productive. Professor Erickson has reviewed for this Report an extensive range of alternative criteria which might be considered for assuring quality in a pluralistic setting:

> An examination of pertinent bills from the fifty states suggests that the only possible quality control options are (a) the demand for equivalency to public education and (b) virtually no controls at all. On the contrary, at least the following approaches are available, either individually or in various combinations.
>
> Tailored Criteria. It should be feasible for states to develop, through appropriate consultation, controls

uniquely fitted to conventional and unconventional nonpublic schools. One danger in this approach is that the more orthodox, established nonpublic schools will be consulted primarily. They may help devise controls, intentionally or unintentionally, which function primarily to ward off competition from 'new breed' nonpublic schools.

Proposal Approval. Eligibility for public assistance could depend upon approval of a school's planned programs as described in a proposal. The legislature could specify that proposals were to be judged, not in terms of orthodoxy, but for the educational promise of the ideas expressed. To help ensure that conventional standards would not be enforced, approval panels could be composed for the most part of citizens and scholars drawn from outside the 'educational establishment'. These panels could approve individual proposals, or could be responsible for both functions.

Performance Contracts. Closely akin to proposal approval is the performance contract, simultaneously a method of of allocating funds and a mechanism of program control.[7] The state could contract directly or indirectly with nonpublic agencies, promising payment only if certain results were produced, or perhaps in ratio to the results. Too narrowly specified, performance contracts could function as the most stultifying program controls of all; the phenomenon of 'teaching for the test' is well known in American schools. But it should be possible to design performance contracts to encourage instructional experimentation, especially if the objectives themselves were operationalized in unconventional terms.

Peer Regulation. Some states have delegated quality control in nonpublic education to associations of nonpublic schools that determine and enforce standards for their own members. Here, again, there is some risk that conventional nonpublic schools will attempt to discourage their off-beat confreres.

Exclusion Clauses. A method often proposed for ensuring that state money will not be used to assist schools newly established by radical groups is to limit aid to schools that have been in operation for at least two or three years. Other exclusion clauses may be drafted to have the same effect. Since education, like the press, is one of the state's primary mechanisms for exposing ideas to discussion and debate, this tactic seems particularly lamentable. As a barrier to needed experimentation, it could be disastrous. A high proportion of the most vital experiments could flounder if financial relief were unavailable until operations had been sustained at private expense for two or three years.

What steps should be taken to ensure that State money will not proliferate schools operated by hate-mongering groups on the extreme right or left? The question is full of pitfalls, for thought control seems as evident in extending aid exclusively to ideologically 'safe' schools as in providing subsidies exclusively to ideologically 'safe' magazines, newspapers, and television stations.

> "Probably no deeper division of our people could proceed from any provocation than from finding it necessary to choose what doctrine and whose program public education officials shall compel youth to unite in embracing... Those who begin coercive elimination of dissent soon find themselves exterminating dissenters. Compulsory unification of opinion achieves only the unanimith of the graveyard."[8]

The Supreme Court has maintained, however, that the state may insist in all schools (the dictum should be particularly applicable in tax-supported schools) 'that certain studies plainly essential to good citizenship must be taught, and that nothing be taught which is manifestly inimical to the public welfare.'[9] Accordingly, authorities administering aid could be given power to inspect participating schools and disqualify any in which this demand was not met, while the schools, in turn, should have clearly specified due-process rights of appeal from those decisions. The courts would in all likelihood uphold disqualifications of schools in which overt attempts were made to promote racist doctrines, or to train children to make Molotov cocktails, but officials would no doubt have difficulty excluding schools that seemed dangerous to them yet were not maintaining programs manifestly inimical to the public welfare. Frustration of this type is in the highest of American traditions, a vital component of freedom.[10]

The Informed Parent

One measure used to promote educational quality and equal opportunity in providing options to parents is to provide State Collected information on nonpublic schools. Jencks suggested that a school accepting aid, "agree to make a wide variety of information available about its facilities, teachers, program and students."[11]

Professor Erickson elaboraborates on such a condition of aid:

> This approach to quality control, perhaps the most promising of all, is modelled after the methods of the Securities and Exchange Commission. The state's major regulatory responsibility would not be to approve schools and programs or to demand that all pupils be taught this subject or that, but to keep all schools honest and informative toward their patrons. Each school could be required to make its objective explicit and operational and to provide systematic annual or semi-annual data concerning the outcome it achieves. The state could audit these records on a scientific sampling basis and publish them in a handbook distributed to the public, but parents would do the regulating by patronizing the schools that were most effective and efficient in achieving the desired objectives.
>
> To aid parental interpretation, schools could be categorized in terms of types of students served and objectives espoused. Attention normally should be focused on the gains pupils make during a given period rather than on absolute levels of achievement (often grossly misleading). Extensive information concerning the success of graduates in later schooling and the vocational world should be included as soon as it is feasible to do so.
>
> By disseminating such information, a state could bring enormous pressure to bear for the improvement of instruction, yet simultaneously encourage originality rather than trammeling it.

> In addition to data about outcomes in student behavior, schools should be required to inform parents concerning instructional methods, facilities available, qualifications (not necessarily in typical terms) of personnel, religious affiliation and emphasis (including provisions for students and parents to opt out of religious activities), and the range and characteristics of learning opportunities provided.
>
> If methods other than (or in addition to) the 'informed parent' approach were used to determine what nonpublic schools could participate in public aid, well specified due process procedures should be available, as a matter of right, to any schools whose sponsors felt they had been excluded unfairly.[12]

Economic Barriers

Even with admission-expulsion conditions on aid, economic barriers for the poor exist in the form of tuitions in many school groups at the elementary level, and in all nonpublic schools at the high school level. Providing poverty aid to a school with a high concentration of children from disadvantaged families is not the same as providing an opportunity to attend the school of one's choice. To reduce or eliminate this economic barrier would require compensatory tuition grants to poor families or financial incentives to schools to accept children from disadvantaged families. (SESA poverty aid supplements provide no such incentive.) The formulas to assure that economic barriers are struck down, are complex and their form is debated among the proponents of vouchers. Failure to adopt a mechanism to eliminate tuitions for the poor will continue to exclude them from equal opportunity in the nonpublic sector.

Public Accountability

Accountability is obviously required to assure that funds allocated to nonpublic schools are used for secular purposes and provide quality education with efficiency and demonstrable effectiveness. This means a strict financial accounting to the State. In addition to the requirement that a certified financial statement be provided to the State, the complete right of audit could be set as a condition of aid.

Enforcement

There may be some questions raised as to the State's ability to effectively enforce conditions of aid. There is always a danger that conditions might deteriorate into merely good intentions, but that is not an argument against conditions being imposed. It is usually difficult to enforce nondiscriminatory procedures, but before de facto situations are changed de jure mechanisms need to be available.

Often conditions attached to aid are viewed as "control of education." The conditions suggested for consideration do not require curriculum controls, certification of teacher controls or elaborate requirements on physical facilities, all of which are more likely to lead to government controlled education and support of only conventional nonpublic schools.

The crucial conditions for aid are: open admissions, quality control through performance, access to information about schools, lowering of tuition barriers for the poor, and public accountability.

III. EDUCATIONAL GOALS

Even if all the contentions of nonpublic schoolmen regarding the nature of their economic plight prove to be valid, this would not comprise an adequate justification for granting aid. Public funds should be allocated to aid nonpublic education only if the educational goals of the nation are to be furthered.

What are the avowed educational goals? How extensively are they being met today in nonpublic schools?

On a national level there is no single document setting forth goals of education in relation to nonpublic schools.

Once again New York has led the way in this area. The Board of Regents endorsed additional aid to nonpublic schools. At the same time, they adopted a statement of principles for reviewing legislative proposals concerning aid.

With the circumspection befitting the nation's oldest continuous educational policy-making body, the Regents' endorsement was based solely on considerations of the State's educational goals. There was no reference to an imminent collapse of the nonpublic sector in the absence of immediate aid. There was no reference to the transfer of nonpublic students into public schools in the event of a collapse.

Instead, the educational goals of the State were enumerated, and it was made clear that aid could not be justified unless the public interest in the education of all children in public and nonpublic schools is safeguarded. This statement merits quotation:

> The major goals for education in New York State to which the Regents subscribe are as follows: (1) to provide education of the highest possible quality for the present and future citizens of the State; (2) to provide equal opportunity for all to receive such education without regard to race, creed, color, sex, economic status or national origin: and (3) to provide such education with efficiency, economy and demonstrable effectiveness.
>
> The Regents are committed to respect and protect diversity of the educational institutions of the State. Pluralism has stood our citizens and young people in good stead. The private institutions of the State, of both sectarian and nonsectarian sponsorship, have provided an option for education meeting at least minimum standards of quality and affording opportunities for innovative design. Moreover, they give viability to the right of parents to choose for their children schools other than those established by public authority.
>
> This right of parents and the right of all children to equal educational opportunity are both fundamental constitutional rights. They are not in conflict. Both must be protected in order to maintain their viability as rights, lest the protection of one right shall interfere with or diminish the other.
>
> Such legislation (concerning aid to nonpublic schools) should require accountability for public funds received, should contain safeguards against increasing racial and social class isolation in the nonpublic schools, should

> insure against use of public funds for any sectarian purpose or function and that admission policies be nondiscriminatory except where permitted by law on the basis of creed.
>
> All nonpublic schools receiving public funds must be required to meet standards of quality prescribed by public authority but the State should be involved as little as possible in the operation of nonpublic schools.
>
> Finally, such legislation must conform to the principles of constitutionality already enunciated by the courts or have reasonable prospect of being approved by the courts in the event of a challenge to its constitutional validity.

The principles of equal opportunity, pluralism and parental choice, quality education, and demonstrable effectiveness, enunciated by the Regents form the matrices for an analysis of the nonpublic sector.

Equality of Educational Opportunity

Equality of educational opportunity can be defined as the extent to which all children, regardless of race, creed, color, sex, economic status or national origin have access to educational resources that will give them equal life opportunities. Ideally, in order to evaluate the extent to which nonpublic schools profess this equality, each school would have to be rated according to its total educational environment. Accurate measures for such evaluation do not exist.

The U.S. Supreme Court in 1954 made educational history in Brown v. Topeka by acknowledging the damaging effect on Black students inherent in racially segregated schools. While the Court, in assessing this damage done to children by segregation supported by Law, noted that it "...affects their hearts and minds in ways unlikely ever to be undone," the Regents have applied this belief with equal force to segregation not decreed by law. Thus, the State uses racial and ethnic integration as one indicator of equality. To survey the extent of integration in nonpublic schools, the racial and ethnic characteristics of the total public and nonpublic enrollment have been chosen as a measure.

In addition to measuring ethnic and racial integration, barriers to equality of opportunity may be assessed in terms of the admission of students on the basis of religious requirements, academic standards, educational costs and ability to pay, ease of physical access and availability of information about the schools.

Catholic Schools

Racial and Ethnic Integration. Racially and ethnically balanced schools should reflect the racial and ethnic characteristics of their area. The area can be as large as the whole state, or as small as a neighborhood or the boundaries of a local public school district. On a State-wide basis, nonpublic enrollment does not include minority groups in proportion to their numbers in the State. The nonpublic sector has an 11.7% minority group enrollment compared to 21.9% in the total enrollment (Table 1). Since there is a great variation within the nonpublic sector among school groups, each group is reviewed separatedly to determine

TABLE 1. New York State Racial/Ethnic Characteristics of Students (K-12) in Public & Nonpublic Schools

1969-70

	Public		Nonpublic		Total State	
	Number	%	Number	%	Number	%
Black	520,487	15.1	41,723	5.1	562,210	13.2
Spanish Surnamed	291,610	8.4	50,235	6.1	341,845	8.0
Other Minority	26,355	0.8	4,111	0.5	30,466	0.7
White	2,615,535	75.7	725,294	88.3	3,340,829	78.1
TOTAL	3,453,987	100.0	821,363	100.0	4,275,350	100.0

Computations based on State Education Department data.

where minority students, i.e., Black, Spanish Surnamed and Other Minority,* are enrolled.

Catholic elementary and secondary enrollment is composed of 4.4% Black, 6.9% Spanish Surnamed, 0.2% American Indian, and the remaining 88.5% White (Table 2).

Obviously, the proportion of any given minority group which is Catholic will have a direct effect on minority enrollment in Catholic schools. Black Catholics are not numerous. Less than 2% of American Catholics

---

*Other Minority includes American Indian and Oriental American, unless otherwise specified.

TABLE 2. New York State Racial/Ethnic Characteristics of Students (K-12) in Catholic & All Public & Nonpublic Schools

1969-70

	Catholic		Total Enrollment Public & Nonpublic	
	Number	%	Number	%
Black	30,238	4.4	562,210	13.2
Spanish Surnamed	47,446	6.9	341,845	8.0
Other Minority	1,538*	0.2	30,466	0.7
White	608,883	88.5	3,340,829	78.1
TOTAL	688,105	100.0	4,275,350	100.0

*Note: Catholic figures in this table do not include Oriental American.

Computations based on State Education Department data and Diocesan Summary Reports. Note: Catholic school data contained in this section of the study were not from the same source as the other sections of the report. These data were obtained from New York diocesan records rather than the NCEA data bank.

are Black. Non-Catholics in Catholic elementary schools represent 2.5% of the enrollment. Of these, 68.8% are Black, which means, one-third of the Blacks enrolled in Catholic schools are non-Catholics (Table 3).

In contrast to the Black category, the Spanish Surnamed category, including families from Puerto Rico, Cuba, and Central and South America, is descended from a Catholic tradition. Thus a large but inexplicably untapped pool of Spanish Surnamed families exists, of which over 90% are

TABLE 3. New York State Racial/Ethnic Characteristics of Non-Catholic Students (K-12) in Catholic Schools

1970-71

	Non-Catholic Enrollment		Total Catholic Enrollment		Non-Catholic as % of Total
	Number	%	Number	%	%
Black	11,266	68.8	34,328	5.2	32.8
Spanish Surnamed	582	3.6	47,285	7.2	1.2
Other Minority	312	1.9	3,648	0.6	8.6
White	4,224	25.8	571,231	87.0	0.7
TOTAL	16,384	100.1	656,492	100.0	2.5

Computations based on Diocesan Summary Reports.

concentrated in New York City. One possible explanation is that more families with Spanish Surnames are represented among the lower economic strata than other minorities and cannot afford even modest tuitions. Another possible reason could be the general relationship of this "new" immigrant group to the relatively new non-Spanish speaking structure of the New York Catholic Church.

Aggregate figures on Catholic schools can be misleading. Catholic high schools enroll significantly fewer minority students than do the elementary schools: 6.1% in the high schools compared to 13.0% in the elementary schools (Table 4).

TABLE 4. New York State Racial/Ethnic Characteristics of Students in Catholic Elementary & Secondary Schools

1969-70

	Elementary		Secondary		Total	
	Number	%	Number	%	Number	%
Black	26,410	4.9	3,828	2.5	30,238	4.4
Spanish Surnamed	41,932	7.8	5,514	3.6	47,446	6.9
Other Minority*	1,512	0.3	26	0.0	1,538	0.2
White	466,135	87.0	142,748	93.8	608,883	88.5
TOTAL	535,989	100.0	152,116	99.9	688,105	100.0

*Note: Figures do not include Oriental American.

Computations based on Diocesan Summary Reports.

Two factors help to explain the lower minority group enrollment in the secondary schools: relatively high tuition and academic selectivity. The tuition for secondary schools at $317 is over six times the average for elementary schools. In general, "private" Catholic schools, owned and operated entirely by religious orders and unrelated to a local parish church, draw from higher income level families and often charge tuition of $1,500 annually. Most of these schools are high schools.

Admission to the high schools is academically selective. There are about five applications for each place at the less expensive regional

(Diocesan) high schools. For all private Catholic high schools in 1971, some 16,187 students took the qualifying admission exam in the New York City area, and 80% were admitted.

Since minority group members frequently come from economically and educationally disadvantaged backgrounds, the high tuition and the academic selectivity screen out many potential minority group candidates. Because Catholic elementary schools are the primary feeders for the high schools, the pool of minority group students is low to begin with. No recruiting takes place in the public schools.

Approximately 36% of the State's Total Enrollment is concentrated in the city of New York, and minorities make up 48.2% of the New York City Total Enrollment (Table 5). Catholic schools in the City show a 7.4% Black enrollment, approximately the same as the total nonpublic school group in New York City and significantly lower than the 26.4% Black in the Total Enrollment. Catholic schools enroll 14.5% Spanish Surnamed students compare to the total New York City enrollment of 20.5%, and a 10.6% enrollment for the nonpublic sector.

Integration Within a School. A school group that showed an aggregate enrollment of 50% Black, but had essentially two separate school systems, one Black, accounting for 50%, and one White, is obviously not integrated. The distribution of minority students throughout a school group is of

TABLE 5. New York State Racial/Ethnic Characteristics of New York City Public & Nonpublic School Enrollments (K-12)

1969-70

	Catholic		All Nonpublic		Total Public & Nonpublic	
	Number	%	Number	%	Number	%
Black	20,123	7.4	31,109	7.3	407,431	26.4
Spanish Surnamed	39,348	14.5	44,971	10.6	315,186	20.5
Other Minority	1,288	0.5	3,112	0.7	20,792	1.3
White	211,203	77.7	344,157	81.3	797,114	51.7
TOTAL	271,962	100.1	423,349	99.9	1,540,523	99.9

Computations based on Diocesan Summary Reports and State Education Department data.

crucial significance. Thus, we must examine the distribution of students in racially mixed and racially isolated schools. The categories used to define the schools are as follows:

"All"	- 99-100% White or Minority Group Enrollment
"Mostly"	- 90-98% White or Minority Group Enrollment
"Mixed"	- Neither White nor Minority Group Comprised Over 80% of the Enrollment of the School.

Approximately one half of all the Black elementary and secondary students are enrolled in mixed schools, and a majority of all minority high school students are enrolled in mixed schools. About one half of the students in Catholic schools attend all White schools. On the other hand, about one half of the Black and Spanish Surnamed students enrolled in Catholic schools are in schools with a somewhat equal balance between Minority and White students. Over 80% of elementary and secondary students attend Catholic schools that are 80-100% White; 50.7% of elementary school students and 37.8% of secondary school students attend All White Catholic schools.

Staff Integration. State educational policy concerns itself with staff integration as well as integration in the student body. The characteristics of the teacher are an integral part of the educational environment. The percentage of minority teachers may be considered an important input in the education process, especially as it affects the self-image of minority group students. 10.7% of classroom teachers in Catholic schools are Black. Most of these are elementary lay teachers. Only 1% are Spanish Surnamed. The majority of these are lay teachers in high schools. The majority of the Minority group teachers were distributed among schools with Mixed or Mostly White student bodies. No elementary school Minority teachers and about 10 secondary school Minority teachers teach in "all White" schools. (Public schools are also only slightly integrated at the staff level, but Catholic schools have even a smaller percentage of Black and Spanish Surnamed teachers.)

Economic Barriers. Tuition for a child enrolled in a Catholic elementary school averages $50 annually. The range is anywhere from no tuition at all to about $100. Tuition for a second or third child in an elementary school is minimal or nonexistent. Sometimes a minimal fee of around $25 is charged. If the local church pastor is convinced of the need for a family to have a "scholarship" for their child, he will grant it in terms of a waiver of all or part of the tuition. The head of the family is required to request such consideration directly from the pastor.

The $50 average is derived from the tuition actually collected and not from the scale of tuition in effect at each school, so "scholarships" of this type are reflected in the low figure. Each elementary school sets its own tuition policy with no supervision or guidelines from any central church source. The limited information available shows that Catholic school families are not generally from high socio-economic levels. The latest date available (1967) showed that Catholic elementary school families in New York City had a median income of approximately $7,200. The median income for all city families for that year was estimated at $7,468.[13] It might also be noted that tuition in New York City averages about 30% higher than the State-wide average.

Since so many Catholic school families identify themselves as White, a comparison with New York City White family incomes would show that Catholic school family incomes were about $1,500 lower.

Access. In 1969-70, there were about 1,370 Catholic schools in the State, and they were distributed between urban, inner city, suburban and rural areas (Table 6). As Catholic communities have moved, the schools have usually remained to serve a new clientele. The number and dispersement of elementary schools provide a network which is highly accessible to the student -- usually within walking distance in the big cities. Section 3621 of the State Education Law requires public school districts to provide transportation to and from school for elementary and secondary nonpublic school students on an equal basis with public school students. High schools naturally draw from a larger feeder area, as do public high schools. In the Catholic high schools, transportation

TABLE 6. New York State Catholic Schools by Location

1969-70

	New York City	Other Urban	Suburban	Rural	TOTAL
Number of Schools:	520	233	436	181	1370

Computations based on Catholic School Financial Statements (89.3% sample) and State Education Department data.

is usually available at an additional charge to the parent. They are also quite accessible.

Services for the Disadvantaged. Sufficient data were available to examine costs and revenues at Catholic elementary schools specifically serving the educationally disadvantaged. The primary measure used for selection of these schools is their eligibility for participation in programs funded under Title I of the Federal ESEA of 1965.*

A second standard used to distinguish schools serving disadvantaged students is eligibility to receive additional funds provided by the State's SESA of 1971 to aid nonpublic schools serving areas with a high concentration of low income families (Appendix). SESA uses the same designation as Title IV of the NDEA of 1958.

Most schools designated as serving primarily disadvantaged students are located in New York City. 69% of Title I 1970-71 funds are spent for New York City schools, public and nonpublic. New York City nonpublic school children eligible under Title IV make up 73.5% of the 106,243 State-wide nonpublic eligibility for 1970-71. Most of the schools involved are elementary schools. Not enough high schools participate to allow meaningful averaging of cost or revenue data.

---

*Detailed financial data for Jewish, Other Sectarian, and Nonsectarian schools eligible or not eligible for programs under Title I were available.

Financial statements from the schools show no significant differences between explicit expenditures of ESEA and SESA "poverty area" Catholic elementary schools and the expenditures of schools not so designated. Far greater differences in cost and revenue items appear when the schools are classified by locational criteria, i.e., New York City, Other Urban, Suburban, and Rural.**

The one startling contrast between designated "poverty area" schools and schools not so classified is the ratio of religious order teachers to students. The "poverty area" schools have more religious order teachers per students than the other schools. Since these teachers are lower-salaried than lay teachers, there is an apparently greater resource allocation to the "poverty area" schools in non-monetary form, even though expenditures appear equal in dollar amounts (Table 7).

Religious teachers on the average have higher degree qualifications and longer years of teaching experience than lay teachers. If these teacher characteristics can be said to be an addition to school quality, Catholic schools are allocating greater resources to "poverty area" schools than is apparent from explicit expenditure data.

**Some slight variations appear in a close examination of the financial statements of Catholic elementary schools under Title I and Title IV classifications. Tuition levels are very slightly higher for schools not included under either of these designations, whereas no pattern is discernible on costs per pupil. Also, lay teachers' salaries are approximately 10% lower for schools under Title I and Title IV classifications.

TABLE 7. New York State Pupils Per Religious Order Teacher in Catholic Elementary "Poverty Area" Schools

1969-70

	Eligible Schools		Not Eligible Schools	
	ESEA Title I	NDEA Title IV	ESEA Title I	NDEA Title IV
Pupils Per Religious Order Teacher	59	56	68	66

Computations based on Catholic School Financial Statements.

Jewish Day Schools

Racial and Ethnic Integration. The Jewish Day Schools enroll 52,861 students. Since Minority group students make up less than 1% of this enrollment, the Jewish Day Schools are the least integrated of the four school groups (Table 8).

However, it is important to place such statistics in context of the very special religious orientation of these schools. The Orthodox Jewish community members, who sponsor 93% of the Jewish Day Schools, are a minority among those who identify themselves as Jewish, probably amounting to less than 10%. They are seeking to maintain a cultural identity with a unique code of behavior.

An applicant must be Jewish to be admitted to a Jewish Day School. Where the question of religious status of a student is raised,

TABLE 8. New York State Racial/Ethnic Characteristics of Students in Jewish Elementary and Secondary Schools

1969-70

	Elementary (K-8)	Secondary (9-12)	Total (K-12)
Black	0.2%	0.0%*	0.2%
Spanish Surnamed	0.1%	0.0%*	0.1%
Other Minority	0.1%	0.0%	0.1%
White	99.5%	99.9%	99.6%
TOTAL	99.9%	99.9%	100.0%

* Note: Less than 0.05%.

Computations based on State Education Department data.

a student's family has the right to appeal a principal's decision to a rabbinical tribunal.

There is no central examination procedure for admission to these schools. Each school sets its own requirements. Only a few schools are academically selective. Assurances have been given by the representatives of the Jewish Day Schools that no Jewish child seeking admission to a Jewish Day School is denied a place, even though in some cases the child may not be able to enter the particular school he desires.

Economic Barriers. Jewish Day Schools are financed in part by income from tuition, in part by voluntary contributions through parent-organized fund-raising activities, and in part by donations from synagogues and Jewish philanthropies. Approximately 40% of the budget is covered by tuition. Rates range anywhere from $150 to $1,000. The collected tuitions for the elementary day schools average $391 per child. About 10% of the students pay full tuition, another 20% are on full scholarships, and the remaining 70% pay a substantial part of the tuition. In order to obtain a waiver or partial waiver of tuition, the head of a family must come before the board of the school, submit detailed financial information and testify to his need. This process of submitting to such a thorough examination can be a deterrent in itself. No income information on Orthodox Jewish families is available, and tuition levels may be a barrier to applications.

Access. 85% of the Jewish Day Schools in the State are located in New York City, and most of these are in the boroughs of Queens and Brooklyn. Usually the schools within the City tend to shift as the Orthodox Jewish community shifts, and Jewish schools discontinue to function after Orthodox Jews have left an area. There is no central funding source to even temporarily subsidize schools, so that deficits cannot be continued very long without the schools closing. Jewish Day Schools also operate in all of the other major cities in the State. Thus, the only place where Jewish Day Schools would be inaccessible to a Jewish family would be in rural areas. In such cases families can send children away to Jewish boarding schools.

Since the Orthodox Jewish community is concentrated in New York City, and there is no need for these schools to reach the general population, information about these schools is easily circulated by word of mouth within the Jewish community.

Other Sectarian

Racial and Ethnic Integration. As a group these schools appear to be the most integrated (Table 9), particularly with respect to Black students. It might be of interest to note that nationally 13% of Protestants identify as Black. This group does not have a comparable number of Spanish Surnamed students.

Since there is no breakdown for the racial and ethnic composition of individual denominations, it is possible that some denominations have extraordinary concentrations of Black members. We do not know the school-by-school distribution of Black students within denominations. Racially isolated schools may well exist.

TABLE 9. New York State Racial/Ethnic Characteristics of Students in Other Sectarian Elementary and Secondary Schools

1969-70

	Elementary (K-8)	Secondary (9-12)	Total (K-12)
Black	20.1%	13.0%	18.8%
Spanish Surnamed	2.0%	3.0%	2.2%
Other Minority	1.2%	0.9%	1.1%
White	76.7%	83.1%	77.9%
TOTAL	100.0%	100.0%	100.0%

Computations based on State Education Department data.

Admission Requirements. We have no adequate information on the number of schools and denominations that apply a religious test for admission, but undoubtedly some do. While few of these schools establish academic standards at the elementary school level, most apply them at the high school level.

Economic Barriers. The average tuition for the Other Sectarian schools is $567 for elementary schools and over $1,000 for high schools. Both of these figures represent a significant outlay for a financially pressed family. The Lutheran schools receive an average of $245 in tuition for their elementary schools. Students that are not members of the congregation pay approximately 50% more than those who are members. The Episcopal schools receive an average of over $1,000 per elementary student. These figures are based on dollar amounts actually collected, and therefore reflect aid given through tuition rebates. A few scholarships are also given, but they are not plentiful. Obviously, the tuitions in most denominations will pose a substantial barrier for the poor.

Access. Because of the number of denominations in this group, no conclusion can be drawn as to the physical accessibility of a particular denomination's schools. Information about the schools is very limited and gets practically no general distribution.

It is extremely difficult to generalize in terms of the other factors that might be used to judge equal opportunity for the denominations in this school group. There are too many variations and data is insufficient.

Nonsectarian

Of the 280 schools in this group, 98 are members of the New York State Association of Independent Schools (NYSAIS). These 98 member schools come closest to the image of the eastern preparatory school or academy.

Social and Ethnic Integration. There is a significant variation between the integration level in Nonsectarian schools as a whole and that in the member schools of NYSAIS (Table 10). Whereas 14% of Nonsectarian school enrollment is made up of minority students, the student body in the NYSAIS schools is 4.5% minority.[14] Since these schools by definition do not exercise religious preferences, religious affiliation is not a constraint on fuller integration. Economic and academic barriers are.

TABLE 10. New York State Racial/Ethnic Characteristics of Students in Nonsectarian Elementary and Secondary Schools

1969-70

	Elementary (K-8)	Secondary (9-12)	Total (K-12)
Black	11.9%	8.4%	10.7%
Spanish Surnamed	2.2%	2.5%	2.3%
Other Minority	1.0%	1.1%	1.0%
White	84.9%	88.0%	85.9%
TOTAL	100.0%	100.0%	99.9%

Computations based on State Education Department data.

Admission Requirements. Academic standards for admission to Nonsectarian schools are usually quite strict. However, this group also includes a small number of schools designed to educate the disadvantaged, including elementary and high school dropouts. Such schools may have standards that require a certain degree of student motivation, but traditional academic standards are not considered relevant.

Not generally represented in our statistics are the 40 to 70 community or alternative schools and "street academies" which serve, principally, the disadvantaged. This group has enrollments of about 2,000 to 4,000 students. The State Department of Education keeps incomplete records on these schools and no statistical information is currently available.

Economic Barriers. Tuition for the nonsectarian groups averages approximately $1,388 for elementary schools and almost $2,000 for high schools. This is a deterrent not only for the poor but for many middle class families as well. Scholarships are offered, but these provide funds only for a small number of students. The 98 schools that are members of the Association of Independent Schools offered partial or full scholarships to 13% of their enrollment last year. This averages about $985 per scholarship student. On the other hand, the few alternative or community schools usually charge no tuition and create every opportunity for the disadvantaged to attend.

Access. Nonsectarian schools are distributed in all major locations. Publicly available information concerning the schools is in general much better than for the other school groups. "The Handbook of Private Schools," published by Porter Sargent, is published yearly and contains information on most nonsectarian schools in New York State, including a description of the school, tuition figures and miscellaneous information helpful to submitting applications.

Schools in this group appear to represent extremes in the area of equal opportunity. They vary from economically and academically restrictive "private schools" enrolling 31,572 students,[15] to a few "free" or community schools offering totally open enrollment.

IV. PLURALISM

Pluralism is one of the oldest and most cherished values in American society. In education, pluralism exists to provide parental options, models for experimentation and innovation, and competition among schools for students. The constitutional right of a parent to choose the kind of school his child will attend may not be abridged so long as that choice does not exclude other children from equally rich educational opportunities. Pluralism has often been distorted to promote elitism and segregation. In a more positive sense, it has supported efforts to maintain cultural identity for minority groups. No studies indicate that the major groups of nonpublic schools considered in this Report contribute to divisiveness in American life. In fact, the Greeley and Rossi study indicates that if we examine the education of Catholics in Catholic schools:

> We will find no trace of a 'divisive' effect of Catholic education, nor will control variables produce any such trace. On the contrary, there will be some indication that among the youngest graduates of Catholic schools, there is more tolerance rather than less."[16]

The nonpublic groups provide an alternative to the public school system that has been exercised by the parents of one out of every five children. This exercise of choice is an ongoing process which creates a mixed and somewhat interdependent educational enterprise. For example, of the 72,400 students in nonpublic seventh grades last year, 50,500 continued on to nonpublic secondary schools, and most of the other 31% entered public high schools because of a parental choice to begin a new educational sequence. Thus, the public school system inherits the educational benefits and problems conferred by the nonpublic elementary schools.

However, pluralism in education is far more limited in practice than is apparent, particularly from the viewpoint of any particular parent. Since most nonpublic schools are sectarian and most of these Catholic, members of denominations without numerous schools have only limited options; parents having no church affiliation are even more restricted. As Professor Henry M. Brickell has noted:

> Nonpublic schools have never been a genuine alternative to public schools for most parents in the United States. For the majority, from the beginning of history, the alternative to public schools has been no schools. The most accessible nonpublic school has always been the Catholic parish elementary school, which has been at some points in history almost a 'free public Catholic school,' thanks chiefly to the contributed services of the religious teachers. But even when most numerous these schools have been available to less than half the Catholic children.
>
> For reasons of cost or for other reasons, most Americans do not think seriously of transferring their children to nonpublic schools if the public schools prove unsatisfactory. They are much more likely to move to a suburb where the public schools appear to be better. The strongest evidence of this is a concentric sorting out of the population by levels of educational aspiration, with decaying cities at the center. That classic pattern is as evident in Rhode Island as anywhere else in the nation, as established by the Commission during its major study.[17]

Competition among nonpublic schools, or between the public and nonpublic schools, appears to be a one-way street. Nonpublic schools, particularly in the Catholic group, are trying to come closer to public school salary scales and public school pupil-teacher ratios. Only the nonsectarian schools seem to be exempt from this form of competition because of their already low pupil-teacher ratios and relatively high salary scale.

Support for pluralism has often been based on the argument that nonpublic schools will compete with public schools, and a higher level of educational quality will result in all sectors. Moreover, it is contended that new techniques, if established in nonpublic education, should be a model for the public sector. In this way, the public schools can adopt the effective new procedures to their curricula and thus improve the quality of education.

No studies can be cited to demonstrate the effectiveness of a "free market" concept between public and nonpublic sectors. It is doubtful, however, that a system as large and as centralized as the public school system is susceptible to competition at a local level. Examples of public school principals changing their curriculum to attract students back from a local nonpublic school do not exist.

There are few links among the public schools to allow for the dissemination of information on innovative techniques, and there are no effective links between the public and nonpublic sectors. Neither are there established methods of measuring the effectiveness of any particular techniques used in a particular school, so that to consider nonpublic schools as models for public schools is not valid. Professor Brickell, in his Rhode Island study went further:

> As models for the public schools to copy, nonpublic schools have a number of serious shortcomings. Some nonpublic schools are so tiny and/or have such small classes that public institutions would find them entirely too expensive to duplicate. Most nonpublic schools use noncertified teachers whom the bureaucracy (public school) with its fixed and objective, even sometimes nonsensical, standards would hardly tolerate. Few nonpublic schools offer the curricular variety a public school needs if it is to reach all its diverse pupils.

> Nonpublic schools appear to be less responsive to changes in the external environment than public schools, according to evidence from one study conducted after Sputnik I. (No nonpublic school exists in the same kind of political environment as a public school. It need not respond to the same kind of pressures.)
>
> Most nonpublic schools make little, if any, use of their freedom to innovate. Thus, they have nothing different to be copied. In fact, during the past decade the public schools seem to have moved ahead in this respect. Nonetheless, from time to time, nonpublic schools will attract great attention by being first to cross a new frontier, leading public schools after them.[18]

Thus, pluralism is an integral part of the educational system in New York State in that alternatives do exist. The public school system does not have a monopoly on education. However, tuitions for all but the Catholic elementary schools exclude many families from the benefits of the pluralistic system. Poor families, in particular, are limited in their options not only by financial barriers, but by lack of information, access, and availability of alternative educational opportunities. The vast potential which pluralism holds for creating new school types and for offering real parental options has hardly been tapped.

Quality

Quality in education is extremely difficult to define and even harder to appraise. Measurements are generally not comparable and are elusive. The factors underlying quality in education, even when identified, are not easily evaluated by current standards. The inputs into the education process involve not only the resources of a school, such as teachers, but pupil potential and motivation. For the purpose of looking at State educational goals, a brief overview of the nonpublic schools is provided only to determine if and where major differences in quality exist between public and nonpublic schools. No new measures were created. No in-depth study was attempted.

As a quality measure, the New York State Education Department administers an annual Pupil Evaluation Program (PEP) which has value insofar as it produces uniform statistics. PEP is a test of reading and mathematical achievement given each fall to grades 3 and 6. Minimum competence exams are given at grade 9. Pupils in all public and nonpublic schools are required to take the tests. PEP was established in 1965 to provide information for the administration of Federal ESEA Title I funds, and the yearly results are now available for use as a standard. It is the only standardized test given to nearly all public and nonpublic school students in the State. The results of these tests provide only one measure, and "they are not, in and of themselves, sufficient for making such (educational) evaluations."[19]

Results in the most general form from 1969 show that median scores of students in Roman Catholic schools were somewhat higher in reading and math achievement at grades 3 and 6 than the public school median scores. Children in all other nonpublic schools scored higher in reading and math than Catholic or public school children.

The PEP tests identify students who perform below "minimum competence" levels on the tests as educationally disadvantaged. For all grades and subjects combined, the percent of pupils below minimum competence in 1969 was 26.3% of public school enrollment and 10.8% of nonpublic school enrollment. Since 1966 the percentage of educationally disadvantaged in terms of performance in the public schools had increased from 15.0% to 16.3%, while the percentage in nonpublic schools had decreased from 11.5% to 10.8%.

Another indirect indicator of achievement, where data is available, is the destination of high school graduates. Continuing on to higher education is generally considered to be a desirable objective. School principals were asked in the fall of 1969 to report on the status of students who graduated from their schools in June, 1969 (Table 11). A significantly larger proportion of nonpublic school graduates continue their formal education than do public school graduates. However, since there is no systematic or up-to-date record kept of the path of students after graduation, the figures may to some extent reflect the estimates of the principals or the intentions of the students rather than their final destinations.

To some extent a certain conformity of subject matter and curriculum is assured by the State Education Law requirement that students in nonpublic schools receive at least an "equivalent" education to that offered in the same district in the public schools.

TABLE 11. New York State Distribution of Public and Nonpublic High School Graduates

(Students Graduated in June, 1969)

		Entering Postsecondary				
	Graduates	4-Year	2-Year and Other	Employment	Military Service	Other
Nonpublic	40,539	56.6%	24.6%	15.1%	1.0%	2.7%
Public	182,758	36.8%	28.9%	24.3%	4.1%	5.9%
TOTAL:	223,297	40.5%	28.1%	22.6%	3.5%	5.3%

Computations based on State Education Department data.

It is possible to apply some measurements to the quality of teachers. In Table 12 the education of public school and Catholic school religious order teachers and lay teachers is outlined. Religious training is not taken into consideration in the chart. Obviously, the educational background of a teacher is only one small aspect of the many considerations that might distinguish a good teacher from a poor teacher. A greater percentage of public teachers have masters' and bachelors' degrees than Catholic teachers. Within the Catholic system, the religious order teachers tend to have more formal education and many more years of teaching experience than the lay teachers. Since religious order teachers spend practically all their adult lives teaching, ages of religious order teachers compared to lay teachers is used as a surrogate for comparative religious order-lay teacher experience.

TABLE 12. New York State Education of Catholic and Public Classroom Teachers

1970-71

	Elementary (K-8)		Secondary (9-12)		Total	PUBLIC
	Religious	Lay	Religious	Lay	Catholic	TOTAL 1969-70
	%	%	%	%	%	%
Less than BA	23.2	33.1	1.9	5.0	19.8	3.7
BA	58.8	62.1	34.9	64.0	56.3	62.2
MA	18.0	4.7	62.0	30.4	23.5	33.7
PhD	0.1	0.1	1.3	0.6	0.4	0.4
TOTAL	100.1	100.0	100.1	100.0	100.0	100.0

Every child in a nonpublic school is there because of an active preferential choice made by a parent. Insofar as this interest of a parent in the education of his child is transferable to the child as motivation for learning, the nonpublic school child is motivated in a different way than the public school child.

Socio-economic background of parents may also be reflected in the interests of a pupil. Generally, the Catholic, Jewish and Other

Sectarian elementary schools do not pick from the cream of applicants through any kind of academically restrictive admission procedure.

Nonsectarian schools, however, often give admission tests and are generally college preparatory schools. Independent schools, by means of these academic admission standrads and very high tuitions, select children of high income families. A large majority of the students come from families with over $10,000 income per year.

All high schools in the nonpublic sector are college preparatory and admit students on the basis of test scores and other submitted evaluative criteria. Above-average students (by standard test scores) comprise the bulk of the enrollment in those schools.

Nonpublic school groups were not able to provide information on the extent of experimentation and innovation in their curricula or the effectiveness of their educational programs. Open classrooms, ungraded classes, mini-schools, and work-study and experimental programs are found in nonpublic schools. There is no evidence to suggest that nonpublic schools in any way lag behind the public schools in experimenting with or adopting new techniques.

The nonpublic sector contains a wide range of school types which vary as to religious affiliation, management, enrollment, educational programs, and other characteristics. Whether a corresponding richness and effectivenss in secular educational styles exist has been the subject of recent investigation outside New York. These studies have found that traditional curriculum and traditional educational techniques are as often the rule in nonpublic schools as in public schools. "The goals and the curricula of nonpublic schools are more similar to, than different from, those of the public schools."[20]

There is not a great difference between the over-all quality of public and nonpublic education in the State. Those standardized measures that do exist illustrate that the nonpublic sector provides an education which is, at the least, equivalent to that given in public schools. Classroom techniques, curricula and the quality of teachers are, on the average, very similar. There are highly visible experimental and innovative programs in some nonpublic schools, although the overall system is no more nor less traditional than the public sector. Of all the measures of quality, those that do stand out most in accounting for differences between public and nonpublic school students deal with measures of parent interest and the socio-economic background of the student.

Educational Efficiency with Demonstrable Effectiveness

With the exception of the nonsectarian group, per pupil costs are lower in nonpublic schools than in public schools. The average per pupil cost in the dominant Catholic group is only $241 as compared with $1,255 in the public sector for elementary and secondary schools.*

Educational efficiency can be measured by relating costs to the quality of the educational output. As the nonpublic schools provide an education at least equivalent to that provided in the public schools, and since they accomplish this at lower costs, it can be concluded that nonpublic schools do meet standards of educational efficiency with demonstrable results.

The distance to be traveled in a progressive state like New York to achieve equality of educational opportunity in the public and nonpublic school sectors is sufficiently great that any federal nonpublic school aid legislation contemplated must take into consideration the need to attach conditions for equal opportunity and to provide mechanisms to encourage all states and localities to enforce said conditions.

---

*Religious order and lay teachers in the Catholic schools are paid substantially less than public school teachers. This low compensation level is reflected in the low per pupil costs of Catholic schools.

FOOTNOTES

1. John E. Coons, and Stephen D. Sugarman, "A Precis of Selected Family Choice Systems" unpublished study for the Commission, July, 1971.

2. New York State Law 7972, May 23, 1971 (SESA), Sec. 2.

3. Robert M. Lekachman, "Education Report: Vouchers & Public Education," New Leader, July 12, 1971, p. 10.

4. Ibid., p. 12.

5. Center for the Study of Public Policy, Education Vouchers: A Report on Financing Elementary Education by Grants to Parents (Cambridge, Mass.: The Center, December 1970), p. 13.

6. Ibid., p. 15.

7. Leon M. Lessinger, Every Kid a Winner: Accountability in Education (New York: Simon and Schuster, 1970).

8. West Virginia State Board of Education v. Barnette, 319 U.S. 624, at 641 (1943).

9. Pierce v. Society of Sisters, 268 U.S. 510 (1925). The Court also said the state could insist that "teachers shall be of . . . patriotic disposition," but in the light of recent cases there can be little doubt that a clause of this type would now be struck down as unconstitutionally vague.

10. Donald A. Erickson, "State Aid to Exotic Schools" a background memorandum prepared for this Report, May 15, 1971.

11. Center for the Study of Public Policy, p. 15.

12. Erickson, op.cit.

13. Louis R. Gary, Survey of New York Catholic School Families, New York City: A Preliminary Report (New York: 1967), Part 10.

14. Presentation of the New York State Association of Independent Schools to the Commission, January 13, 1971, p. 7.

15. Ibid., p. 2.

16. Andrew M. Greeley and Peter H. Rossi, The Education of Catholic Americans (Chicago: Aldine Publishing Co., 1966), p. 120.

17. Henry M. Brickell, Nonpublic Education in Rhode Island: Alternatives for the Future, (The Rhode Island Special Commission to Study the Entire Field of Education: Providence, 1969), p. 17.

18. Ibid., p. 18.

19. New York State Pupil Evaluation Program School Administrator's Manual, NYSED, June 1970, p. 21.

20. Commonwealth of Massachusetts Special Commission to Study Public Financial Aid to Nonpublic Primary and Secondary Schools and Certain Related Matters, Summary Report, May, 1971, p. 8.

APPENDIX A

ATTITUDES TOWARD NONPUBLIC EDUCATION

CONTENTS

Sources Contacted 514

Annotated Bibliography 517

National Survey of Attitudes Toward Nonpublic Schools 536

SOURCES CONTACTED

(A) Catholic Diocesan School Systems

Altoona-Johnstown, Pennsylvania
Baltimore, Maryland
Belleville, Illinois
Birmingham, Alabama
Boise, Idaho
Burlington, Vermont
Davenport, Iowa
Des Moines, Iowa
Dubuque, Iowa
Fall River, Massachusetts
Galveston-Houston, Texas
Grand Island, Nebraska
Great Falls, Montana
Indianapolis, Indiana
Joliet, Illinois
Lincoln, Nebraska
Madison, Wisconsin
Manchester, New Hampshire
Marquette, Michigan
Milwaukee, Wisconsin
Mobile, Alabama
Montgomery, Alabama
New York, New York
Omaha, Nebraska
Peioria, Illinois
Philadelphia, Pennsylvania
Phoenix, Arizona
Pittsburgh, Pennsylvania
Portland, Oregon
Rockville Centre, New York
St. Cloud, Minnesota
St. Paul-Minneapolis, Minnesota
San Francisco, California
Sioux Falls, South Dakota
Spokane, Washington
Steubenville, Ohio
Tucson, Arizona
Winona, Minnesota
Youngstown, Ohio

(B) Member Associations, National Association of Independent Schools

Connecticut Association of Independent Schools
California Association of Independent Schools
Independent Schools Association of the Central States
Independent Schools Association of the Southwest
Independent Schools Association of Massachusetts
New York State Association of Independent Schools
Florida Council of Independent Schools
Independent Schools Association of Northern New England
Mid-South Association of Independent Schools
Pacific Northwest Association of Independent Schools
Southern Association of Independent Schools
Association of Colorado Independent Schools
Arizona Association of Independent Academic Schools
Association of Independent Maryland Schools
Georgia Association of Independent Schools
Independent Schools Association of Rhode Island
Michigan Independent Schools Association
New Jersey Association of Independent Schools
Ohio Association of Private Academic Schools
Pennsylvania Association of Independent Schools
Pennsylvania Association of Independent Schools
Pennsylvania Association of Private Academic Schools
Virginia Association of Independent Elementary Schools
Virginia Association of Independent Preparatory Schools
Hawaii Association of Independent Schools
Cleveland Council of Independent Schools
Association of Independent Schools of Greater Washington
Association of Teachers in Independent Schools of New York City and Vicinity
Friends Council on Education
Independent Schools Association of Greater Chicago
Independent Schools Teachers Association of Philadelphia and Vicinity
Maine Association of Independent Schools
National Association of Episcopal Schools
New York City Guild of Independent Schools
North Carolina Association of Independent Schools
Commission on Independent Secondary Schools (NEACSS)
Commission on Secondary Schools (MSACS)

Commission on Secondary Schools (SACS)
Secondary School Commission (North Central Association of Colleges and Secondary Schools)
Commission on Secondary Schools (Western Association of Schools and Colleges)

(C) Miscellaneous

Donald A. Erickson, School of Education, University of Chicago
George F. Madaus, Center for Field Research and School Services at Boston College
William D. Hitt, Battelle Memorial Institute, Columbus, Ohio
Alfred W. Meyer, Indiana Committee on Non-Public Schools
Raymond R. Rufo, Indiana Catholic Conference
Cary Potter, National Association of Independent Schools
Otto Kraushaar, Graduate School of Education, Harvard University
Office of School Surveys and Studies, University of Texas
Stanford School Planning Laboratory, Stanford University
New England Catholic Education Center, Boston

ANNOTATED BIBLIOGRAPHY

(1). Belleville, Illinois: Diocesan Education Study: 1970 (Catholic Education Research Center, Boston College), 1970.

Background: Study entirely attitudinal in nature. Represents culmination of efforts of eleven-member diocesan board of education to assess lay and religious attitudes toward various programs of Catholic education. Results were to aid in policy making.

Major Researchers: Catholic Education Research Center, Boston College, contracted in spring 1969 to prepare and tabulate responses to appropriate questionnaire.

Sample: 10,768 laymen (about 37 per cent of approximately 37,000 contacted), 129 priests and 33 major seminarians (about 57 percent of 285 contacted), and 507 nuns and 26 brothers (78 percent of 682 contacted).

Dates: Data Collection and analysis conducted during 1969-1970. Study released in March, 1971.

(2). Boise, Idaho: Catholic Education Study (Census Management, Inc.), 1969.

Background: Survey of attitudes of adult Catholics toward diocesan schools represents Phase I of a three part study of lay attitudes toward Catholic educational programs operant within the diocese (Phase II was a survey of CCD personnel regarding programs with which they were involved; Phase III consisted of a survey of Catholic college students regarding the campus apostolate). Three part attitudinal accompanied by descriptive study of diocesan elementary schools (i.e., enrollments, personnel, expenditures).

Major Researchers: Census Management, Inc. of Washington, D. C. engaged to conduct attitudinal survey.

Sample: 8,133 Catholic laymen 18 years of age or over (approximately 40 percent of diocesan total).

Dates: 45 item instrument distributed at all Masses on "Survey Sunday" (Febr. 23, 1969). Respondents requested to return complete forms to Bishop's office by March 16, 1969. Completed analysis released in May, 1969.

(3). Boston, Massachusetts: Catholic Education in the Archdiocese of Boston: The Voices of the People (Donovan and Madous), 1969.

Background: Study initiated by archdiocesan officials to "tap" values and attitudes of citizenry pertinent to Catholic education. Results were to facilitate more effective planning for the future.

Major Researchers: Archdiocese contracted John D. Donovan (Department of Sociology, Boston College) and George F. Madaus (Catholic Education Research Center, Boston College) to conduct research. Principal authors, in turn, obtained assistance of Louis Harris Associates in designing and implementing appropriate questionnaire.

Sample: 1,721 adult lay Catholics (of whom 501 were parents of parochial school children), 1,060 adult lay non-Catholics, 144 Catholic priests, 197 teaching sisters, 102 lay teachers in Catholic schools, 147 non-Catholic clergy, 63 public school board members, and 23 superintendents of public schools.

Dates: Data collected by Harris interviewers during March and April, 1969. Analysis of data ongoing through July, 1969. Report released in August, 1969.

(4). Corpus Christi, Texas: Roman Catholic Secondary School Study (Office of School Surveys and Studies, University of Texas), 1967.

Background: Research initiated by diocesan officials to determine feasibility of introducing Roman Catholic secondary education to Corpus Christi. Attitudinal survey is part of more expansive study designed to obtain demographic, financial, and other data.

Major Researchers: In December, 1967 the Office of School Surveys and Studies, University of Texas contracted to conduct study with assistance of diocesan personnel.

Sample: Random sample of 1 out of every 10 names on parish lists chosen. Information on number of respondents this represents and response rate unavailable in text.

Dates: Attitudinal data collected and analyzed early in 1968. Report made available later in same year.

(5). Denver, Colorado: The Denver Metropolitan Area Catholic Schools of the Archdiocese of Denver, Research Study, 1967-1968 (Office for Educational Research, University of Notre Dame), 1968.

Background: Attitudinal survey represents one chapter in more inclusive study in which demographic, enrollment, personnel, academic achievement, and fiscal data were also collected. Results were to aid in effective decision making.

Major Researchers: Office for Educational Research, University of Notre Dame.

Sample: Questionnaires distributed to parents of all twelfth grade pupils in Catholic high schools and to parents of eighth grade pupils in 24 randomly selected parochial elementary schools. Parents of public school eighth and twelfth graders selected from

CCD class lists and parish membership rolls. Of 2,834 questionnaires distributed, 1,494 were returned, all usuable. Of this number, 1,312 (86 percent) were from parents of public school students.

Dates: Data collected and analyzed during late 1967 and early 1968. Study made available in July, 1968.

(6). Des Moines, Iowa: A Study of the Attitudes and Perceptions of Catholic Parents Toward Catholic Education in Metropolitan Des Moines, Iowa (Sister Marie Michelle Schiffgens, unpublished doctoral dissertation, University of Iowa), 1969.

Background: Doctoral dissertation, College of Education, University of Iowa.

Major Researcher: Sister Marie Michelle Schiffgens.

Sample: 4 specific population groups identified for inclusion in study: (a) parents having children currently enrolled in Catholic schools from 14 parishes in metropolitan Des Moines maintaining elementary schools, (b) parents who had withdrawn their children from Catholic schools during 2 years prior to study, (c) parents having only pre-first grade age children from 14 parishes in metropolitan Des Moines maintaining elemtnary schools, and (d) parents of pre-school, elementary, and/or high school age children from 5 metropolitan Des Moines parishes not maintaining elementary schools. Data secured via mailed questionnaires completed by heads of households. Of 5,103 questionnaires sent out, 3,026 (60 percent) were returned.

Dates: Data collected in fall, 1968. Analysis completed and dissertation accepted by August, 1969.

(7). Dubuque, Iowa: Christian North East Educational Development Survey (Archdiocese of Dubuque; and Catholic Education Research Center, Boston College), 1969.

Background: Survey represents attitudinal component of 5-part study begun in 1962 and designed to aid in up-dating of Catholic education in Dubuque.

Major Researchers: Data obtained via 2 survey forms--one prepared by diocesan personnel, the other by the Catholic Education Research Center (Boston College). Both agencies participated in analysis of data.

Sample: Instruments administered to 16,707 religious, lay teachers, and parents. Of these, 11,438 (68.5 percent) responded.

Dates: Dates of data collection and analysis not provided in report. Results made available in 1969.

(8). Fall River, Massachusetts: Survey of Public Attitudes Toward Catholic Education (Catholic Education Research Center, Boston College), 1969.

Background: Survey conducted in response to overtures from diocesan officials who hoped to utilize results in affecting needed changes in Catholic educational programs operant in Fall River. Officials requested survey similar to that then being conducted by Donovan and Madaus for Archdiocese of Boston.

Major Researchers: Catholic Education Research Center, Boston College, contracted to conduct survey. Boston College researchers, in turn, commissioned Louis Harris Associates to handle all interviewing.

Sample: 414 adult lay Catholics and 154 adult lay non-Catholics

Dates: Data collected by Harris interviewers and analyzed by CERC staff early in 1969. Report released later the same year.

(9). Great Falls, Montana: Operation Outreach (Diocesan Office of Education), 1969.

Background: Self-study undertaken by diocesan Office of Education. Attitudinal data collected along with information pertaining to enrollments, academic achievement, and school finance.

Major Researchers: Diocesan Office of Education (under direction of Rev. Harold P. Arbanas).

Sample: 524 respondents from 51 parishes in Diocese of Eastern Montana. No other information available.

Dates: Research conducted in 1968-69. Report made available in 1969.

(10). Hillsborough County, Florida: Issues and Challenges of Catholic Education in Hillsborough: A Study of Catholic Elementary and Secondary Education in Tampa, Hillsborough County, Florida (Office for Educational Research, University of Notre Dame), 1970.

Background: Attitudinal survey represents part of more inclusive study in which enrollment, financial, academic achievement, and other data were also collected. Results were to facilitate more effective planning and decision making.

Major Researchers: Office for Educational Research, University of Notre Dame (William Friend, Richard Metzcus, Reginald Neuwien, Donald Barrett, Gregory M. Holtz, Robert F. Lovely, and Eugene Hemrick).

Sample: 811 lay Catholics (33 percent of 2,400 contacted) and 206 clergy and Catholic school personnel (64 percent of 320 contacted).

Dates: Data collected in February, 1970. Analysis completed and study made available by mid-year.

(11). Indianapolis, Indiana: Catholic Education Study Report: Alternatives in Catholic Education (Elford), 1968.

Background: Study undertaken to provide basis for long range planning. Diocese of Evansville, Indiana, and Archdiocese of Louisville, Kentucky, also participated. Research entirely attitudinal in nature.

Major Researchers: Rev. George Elford (then completing doctoral studies at Indiana University, later named Superintendent of Schools for the Archdiocese of Indianapolis, and currently serving as Director of Research for the National Catholic Education Association) appointed study director by steering committee of Board of Education of Archdiocese of Indianapolis. Catholic Education Research Center, Boston College contracted to consult, as were Professors Paul Seagers and David Beggs III of Indiana University. CERC developed the "Survey of Attitudes and Opinions of Catholic Education," a 146-item questionnaire (only 109 items were employed in Louisville) which was administered to priests, sisters, and laymen in Indianapolis, Evansville, and Louisville (background questions asked of religious differed somewhat from those asked of laymen). Distribution and collection of instrument handled on parish level by volunteer personnel. All of above (except parish volunteers), as well as Peter Cislak, director of electronic data processing for the Reilly Tar and Chemical Co. (Indianapolis), involved in analysis of data.

Sample: 51,560 laymen (approximately 40 percent of 130,000 contacted, 199 pastors, 158 assistant pastors, and 227 sisters.

Dates: Data collected during February and March, 1968. Analysis begun in April, 1968. Report released in September, 1968.

(12). Indianapolis, Indiana: Catholic Education Study Report: Alternatives in Catholic Education (Elford), 1969. (Revised Edition).

Revision of 1968 report. Contains no significant alterations. Followed by yet another related document: "A Further Look at Survey Findings," unpublished manuscript (April, 1970).

(13). Joliet, Illinois: Catholic Education Study--Diocese of Joliet (Diocesan Board of Education), 1970.

Background: Self-study conducted by Board of Education of

Diocese of Joliet (under supervision of Rev. Niles Gillen and Rev. Anthony De Filippis). Purpose of study was to examine views of Joliet Catholic Community toward a number of alternative approaches to dealing with problems currently confronting Catholic education.

Major Researchers: Diocesan Board of Education. Employed CERC--developed questionnaire first used in Elford's Indianapolis--Evansville--Louisville study.

Sample: 20,004 laymen (25 percent of 70,000 contacted) and 1,040 priests, brothers, sisters, and seminarians (52 percent of 2,000 contacted).

Dates: Dates of data collection and analysis not provided. Report released in April, 1970.

(14). Lincoln, Nebraska: A Study of the Attitudes of Parents Toward Catholic Elementary and Secondary Education in Lincoln (Sister Francetta Cronin, unpublished master's thesis, University of Nebraska), 1969.

Background: Master's thesis, Department of Educational Administration, University of Nebraska.

Major Researcher: Sister Francetta Cronin.

Sample: All Catholic parents who had children enrolled in Catholic and/or public elementary and/or secondary schools in Lincoln during the 1968-69 school year. Of 1,815 mailed questionnaires, 960 (53.4 percent) were returned and processed.

Dates: Data collected in February, 1969. Analysis completed and report made available by October, 1969.

(15). Marquette, Michigan: Catholic Education in Marquette, Michigan (Hanlon and De Roche), 1968.

Background: Study generated by rising costs and declining enrollments plaguing Marquette diocesan schools in 1968. Research designed to answer 3 questions: (a) Is there a sufficient enrollment base in the Marquette area to warrant the maintenance of a separate, comprehensive school system? (b) Is there a sufficient financial base to maintain such a system? (c) What is the level of lay acceptance of, and support for, such a system? Questions (a) and (b) required enrollment and financial data respectively, while question (c) called for an attitudinal survey.

Major Researchers: Steering committee of diocesan Board of Education contracted Dr. James M. Hanlon (Associate Dean, College of Liberal Arts, Marquette University) and Dr. Edward F. De Roche (Assistant Chairman, Department of Education, Marquette University) to conduct the survey.

Sample· 429 heads of households and 58 single men and women (unmarried, widows or widowers without children).

Dates: Research team contracted in spring, 1968. Data collected in mid and late 1968. Report released in December, 1968.

(16). Montgomery, Alabama: A Demographic and Attitudinal Study Concerning Catholic Education in Montgomery, Alabama (Office for Educational Research, University of Notre Dame), 1970.

Background: Attitudinal survey complemented by demographic analysis. Overall study designed to aid in implementation of effective planning.

Major Researchers: Office for Educational Research, University of Notre Dame (William Friend, Donald Barrett, Gregory M. Holtz, Robert F. Lovely, et al).

Sample: All adult envelope-using parishioners in smaller parishes and those parishes serving blacks, and one out of every two adult envelope-using parishioners in larger parishes mailed questionnaires. A total of 583 (46.6 percent of those mailed out) were returned for processing.

Dates: Data collected during February and March, 1970. Analysis completed and study made available later the same year.

(17). Pittsburgh, Pennsylvania: Report of the Education Study Commission (Diocesan Education Study Commission), 1970.

Background: Attitudinal survey represents one chapter in 465 page report on status of Catholic education in Diocese of Pittsburgh. Overall study designed to facilitate effective planning for the future.

Major Researchers: Essentially a self-study conducted by episcopally appointed 11 member Diocesan Education Study Commission. Psychological Service of Pittsburgh was contracted to complete attitudinal component, however.

Sample: 263 principals and headmasters of Catholic elementary and secondary schools (90 percent of diocesan total 293), 3,565 teachers in Catholic elementary and secondary schools

(94 per cent of diocesan total 3,775) 284 priests assigned to the diocese (44 percent of diocesan total 650; response rate later increased as result of follow-up letter requesting fuller co-operation) and roughly 4,390 heads of households (out of approximately 16,430 contacted via a 20 percent stratified random sample).

Dates: Attitudinal data collected and analyzed throughout 1969. Results of survey submitted to Education Study Commission in January, 1970. Overall report released in August, 1970.

(18). Rhode Island: Non-public Education in Rhode Island: Alternatives for the Future (Brickell), 1969.

Background: Study completed under the auspices of the Rhode Island Special Commission to Study the Entire Field of Education, and funded via appropriations from the Rhode Island General Assembly. Final report represents a complete (demographic, financial, attitudinal, etc.) assessment of status of non-public schools in Rhode Island. Attitudinal data is limited to Catholic schools only, however.

Major Researchers: Henry M. Brickell (Professor of Education and Associate Dean for Research and Development, School of Education, Indiana University) assisted by David W. Pankake.

Sample: 4 separate groups of Catholics surveyed: lay Catholics (a 5 per cent random sample of all lay Catholic families from 50 parishes selected at random from the 160 in the Diocese of Providence was surveyed; roughly 2,000 or 73 per cent of those contacted returned usuable answer sheets), lay teachers (all lay teachers in 126 of the 128 parish, diocesan, and private elementary and secondary schools in the Diocese of Providence were surveyed; a 78 per cent response was obtained), religious teachers (all religious teachers in 126 of the 128 parish, diocesan, and private elementary and secondary schools in the Diocese of Providence were surveyed; an 89 percent response was obtained), and Catholic clergymen (all 450 Catholic clergymen in the Diocese of Providence were mailed questionnaires; a 45 percent response was obtained).

Dates: Attitudinal survey conducted in fall, 1968. Responses analyzed and overall report made available by July, 1969.

(19). St. Louis Missouri: Catholic Education in St. Louis: An Attitudinal Study (Office for Educational Research, University of Notre Dame), 1970.

Background: Attitudinal study is one of 5 volumes resultant of St. Louis research (3 other volumes focused upon the allocation and distribution of human and financial resources, religious education programs, and demographic variables, while a fourth provided a capsule summary of the entire study). Results were to facilitate effective planning and decision making. For a discussion of St. Louis research findings see Frank J. Fahey, "Catholic Education in the Archdiocese of St. Louis: A Case Study," Notre Dame Journal of Education, 2(Winter, 1971): 68-75. See also St. Louis Review (newspaper of the archdiocese of St. Louis); May 28, 1971; special supplement.

Major Researchers: Office for Educational Research, University of Notre Dame (Gregory M. Holtz, Robert F. Lovely, and Richard G. Kiekbusch).

Sample: St. Louis sample consisted of 2 major groups: concerned participants (clergymen, religious and lay teachers); questionnaires mailed to all--nearly 6,000--clergy and school personnel in the archdiocese; approximately 3,000 or 50 per cent responded, and Catholic laymen (5,000 laymen chosen via systematic selection of every twentieth name on the roll of each parish; just under 2,000 or approximately 30 per cent responded).

Dates: Data collected in spring, 1970. Analysis followed and attitudinal component (along with accompanying volumes) released later the same year.

(20). Savannah, Georgia: Chatham County Catholic Schools of the Diocese of Savannah, Research Study, 1969 (Office for Educational Research, University of Notre Dame), 1969

Background: Attitudinal survey was part of more extensive study in which demographic, enrollment, financial, and other data were collected as well. Total work represents assessment of status of Catholic education in Savannah, and an attempt to provide base for sound decision making and policy formulation.

Major Researchers: Office for Educational Research, University of Notre Dame.

Sample: "Parents Opinion Questionnaire" completed by 192 mothers and 199 fathers. Of the 391 respondents, 316 were Catholic and 70 were Protestant. Five (5) listed "other" for religious affiliation. Sample included 56 blacks and 32 Catholic parents with children in public schools. All 391 had at least one child in Chatham County Catholic or public schools.

Dates: Data collected and analyzed in late 1968 and early 1969. Report made available in May, 1969.

NATIONAL SURVEY OF ATTITUDES TOWARD NONPUBLIC SCHOOLS

Early in 1969 the advisory commission of A Study of the American Independent School (a Danforth Foundation-sponsored research project directed by Otto F. Kraushaar and completed in 1969) contracted Gallup International to conduct a national survey of public attitudes toward nonpublic schools. A summary of the important findings[1] arrived at Notre Dame's Office for Educational Research too late for incorporation into the text of this report. Its inclusion in Appendix A, however, represents an attempt to extend the scope of OER's attitudinal review beyond the confines of strictly Catholic schools. The ensuing paragraphs constitute an examination of Gallup data within the analytical framework provided by chapter II of the present report.

A. Demand: An Overview. Diocesan studies indicate that American Catholics, while recognizing the role of the parent as a religious educator, do want their children to receive some formal religious instruction as well. Lay opinion varies, however, as to the context within which such training should be dispensed. While conventional parochial schools receive a good deal of support, Catholic laymen also display a willingness to utilize other available alternatives. This openness to other than traditional formats is especially evident among younger, better educated, upper income, suburban Catholics whose appraisal of the quality of parochial schools (relative to other options) is consistently less favorable than that of their older, less educated, middle-to-lower income, urban counterparts. The presence of modern, well-staffed public schools in suburban areas appears to be largely responsible for this differential assessment. All Catholics, regardless of age, education, income, or area of residence, seem to recognize some unique offering of Catholic schools. In short, while there does exist a blanket demand for Catholic education in the United States (volume), internal variations in this demand are evident (distribution).

Gallup data concur with diocesan data regarding the volume of demand, but differ somewhat with respect to distribution. Gallup respondents were exposed to the following item: "As you know, there is talk about taking open land and building new cities in this country. New cities, of course, would include people of all religions and races. If such communities are built, should there be parochial and private schools in addition to public schools?" This question was intended to probe respondents' views as to the basic concept of other-than-public education. Respondents were not asked to hypothetically contend with any of the problems inherent in maintaining or closing currently operant nonpublic schools, but rather to determine whether or not they would desire the construction of such schools should they have a hand in fashioning an entirely new community. The following distribution of responses was obtained (Gallup, 4):

Yes, there should be parochial and private[2] schools.	72 percent
No, there should not be parochial and private schools.	23 percent
No opinion or no answer	5 percent

Quite obviously, the bulk of the sample favored a system featuring an array of educational alternatives. While many expressed further their belief that one of the virtues of public schools is that they "bring all classes of people together" and that they provide a "more true-to-life environment" in which to teach young people (Gallup, 4), few would insist that all children be required to attend public schools.

Gallup respondents were also confronted with the following: "If you were to rate the quality of education received by children in your community, which one would you say is best--private, parochial, or public school?" Responses were as follows (Gallup, 3):

Private	14 percent
Parochial	15 percent
Public	43 percent
All equal	20 percent
No opinion	8 percent

While nearly half the sample (43 percent) attributed unequivocal superiority to schools in the public sector, an additional 49 percent felt that nonpublic schools were at least the equal of, if not better than, public schools. Like the majority of diocesan studies, then, Gallup research indicates considerable overall demand for educational facilities of the nonpublic variety.

Unlike the diocesan studies, however, the Gallup poll revealed little internal variation in this demand by age, education, income, or area of residence. For example, on the item pertaining to the construction of nonpublic schools in new communities, all major groups responded in favor--and by substantial margins (Gallup, 6). Where slight variations were discernible they tended neither to support nor disavow those observed in the diocesan data (e.g., As in the diocesan studies, respondents in large urban centers were more favorable toward the presence of nonpublic schools than those in suburban areas; contrary to diocesan research, younger persons were more supportive of nonpublic education than were older respondents) (Gallup, 7).

Gallup responses did vary along another social dimension, however: familiarity with nonpublic schools. Generally, those who were most knowledgeable with respect to such schools expressed the greatest demand for them, and rendered more favorable assessments as to their comparative quality.[3] Returning to that item pertinent to the construction of nonpublic schools in new communities, the distribution of responses of only those who resided in areas where both parochial and private schools were available is seen below (Gallup, 4):

Yes, there should be parochial and private schools.	84 percent
No, there should not be parochial and private schools.	12 percent
No opinion or no answer	4 percent

A comparison of the responses of this sub-sample to those of the nation-wide sample reveals the former to be more receptive to nonpublic schools (12 percent more feel they should exist; 11 percent fewer feel they should not).

A similar pattern characterized responses to the question eliciting an assessment of comparative quality ("If you were to rate the quality..."). Residents of communities in which parochial and private, as well as public, schools were operant responded as follows (Gallup, 3):

Private	24 percent
Parochial	21 percent
Public	32 percent
All equal	20 percent
No opinion	3 percent

With the extent of familiarity with nonpublic schools controlled, 65 percent of those in areas featuring all 3 types of schools (parochial, private, and public) felt that non-public schools were at least the equal of their public counterparts (as opposed to 49 percent of the total national sample), while only 32 percent imputed unqualified superiority to schools in the public sector (as opposed to 43 percent of the nation-wide sample).

The Gallup poll, then, duplicated on a broader scale diocesan findings regarding the overall volume of demand for nonpublic schools (finding it to be considerable). Gallup data on demand distribution, however, were somewhat at odds with diocesan data (the latter revealing a diminishing demand among younger, better educated, upper income, suburban respondents; the former indicating almost no internal variation among major socio-economic sub-samples). This apparent difference in the distribution of demand for nonpublic education (diocesan studies vs. Gallup poll) may be explanable in terms of the variations in sample makeup (preponderantly Catholic diocesan samples vs. mixed Gallup sample) or in terms of the differences in schools to which respondents were referring (Catholic schools as the referents in diocesan studies vs. all nonpublic schools as the referents in the Gallup investigation). Gallup data did reveal one outstanding bit of variance, however--a direct relationship between demand for nonpublic schools and respondent familiarity with such schools.[4]

B. Demand: Determinants. Diocesan studies indicate that Catholic schools are perceived as superior in providing for religious, social, and personal growth, whereas public schools are attributed superiority insofar as academic offerings, operational efficiency, and overall practicality are concerned (perceived distinctiveness). This differential imputation of superiority enjoys a great deal of universality, and tends to be characteristic of all age, educational, income, and residential subsamples. Quality assessments of educational programs, and subsequent decisions as to where to enroll one's children (the exercise of educational choice), are essentially a function of one's personal, education-related set of priorities (e.g., one who places a higher relative price tag upon religious, social, and personal growth will tend to gravitate toward the Catholic sector where such growth is allegedly better fostered) (perceived quality). Insofar as perceptions of educational distinctiveness and quality are complex phenomena, variations in the above are not uncommon.

Gallup respondents were not requested to compare public and nonpublic schools on selected items, nor were they asked to convey what they felt were the distinctive traits of both public and nonpublic schools (as were many diocesan lay respondents). They were required, however, to express their views as to why a parent would send his child (or children) to each of the three types of schools (parochial, private, and public) under study. The reader might glean from these 3 response sets respondents' perceptions of both the unique properties of parochial, private, and public schools (perceived distinctiveness), and the reasons why parents elect to enroll their children in each (perceived quality).

When respondents in those communities containing parochial, private, and public schools were asked why parents send their children to parochial schools, the following response pattern was obtained (items arranged in approximate order of frequency of mention, appropriate "Notre Dame" classifications added) (Gallup, 10):

*(1) Because they were raised as Catholics to believe that the only schools to send their children to are parochial schools.[5]

(2) No person is completely educated without exposure to all sciences. You can't teach biology without theology. (Religious)

(3) Because they want them to believe in God and grow up to be nice citizens. (Religious, Social)

(4) Better quality of education and religious education. (Academic, Religious)

(5) Hope of specialized education. (School operation)

(6) Teachers take more time with the children. (Personal)

(7) Because the nuns are strict and help[6] parents raise good kids, makes it easier on us. (Personal)

(8) Better maintenance of discipline and authority. (Personal)

(9) Better supervision, better moral standards--teamwork in whatever he does. (Personal, Religious)

*Not classifiable on "Notre Dame" schema.

Seventy-eight (78) percent of the sample responded with one of the first 3 items, or variants of these. Another 13 percent responded with items (4), (5), or (6), while 8 percent answered in a fashion characterized by items (7), (8), and (9). Of the 9 items, 6 (numbers 2, 3, 6, 7, 8, and 9) were of a religious, social, and/or personal nature. One (1) (number 5) was school operational; 1 (number 4) was both academic and religious; and a ninth was non-classifiable. Perhaps the most outstanding feature of this response set was the perceived preoccupation with discipline and the maintenance of order attributed to parents of Catholic school students (items 7, 8, and 9). Gallup data, then, appear to concur with diocesan findings regarding reasons for parochial school enrollment (primarily religious, social, and personal reasons).

Respondents in 3-school areas were also asked: "What are the chief reasons why parents send their children to private schools?" Responses were as follows (items arranged in approximate order of frequency of mention, appropriate "Notre Dame" classification added) (Gallup,9):

(1) Private schools give children more individual attention. (Personal)

(2) Students get a better preparation for college. (School Operation)

(3) Private schools can get better teachers. (School Operation)

(4) The public schools are bad scholastically. (Academic)

*(5) Going to a private school is a status symbol.

*(6) They want to keep their children in their own class.

(7) To get them away from students who fight all the time. (Personal)

*(8) Because they don't want their children associating with lower class children.

(9) Private schools supervise their students better. (Personal)

(10) They don't have to stand for nonsense the way the public schools do. (Personal)

(11) Children have to behave. (Personal)

*(12) To avoid integration.

(13) There are no race problems in private schools. (Personal)

*Not classifiable on the "Notre Dame" schema.

Sixty-four (64) percent of the sample responded with items (1), (2), (3), or (4). Thirty-two (32) percent responded via items (5) through (8), 12 percent via items (9) through (11), and 10 percent via items (12) or (13). Of the

13 items, 6 (numbers 1, 7, 9, 10, 11, and 13) were personal in nature. Two (2) (numbers 2 and 3) were school operational; 1 (number 4) was academic; and 4 (numbers 5, 6, 8, and 12) were non-classifiable. Apparently, respondents perceive parents as sending their children to private schools for many of the same reasons they elect to enroll them in parochial schools (i.e., religious, social, and personal ones; in this case personal reasons are preponderant). In addition, parents of private school children are thought to be preoccupied with discipline and the maintenance of order in much the same way as parents of parochial school students (items 7, 9, 10, 11, and 13). Reasons for private school attendance as expressed by Gallup respondents, then correspond with reasons for parochial school attendance as explicated by both the Gallup and numerous diocesan samples.

When queried as to why parents enroll their children in public schools, Gallup respondents from 3-school communities responded as follows (items arranged in approximate order of frequency of mention, appropriate "Notre Dame" classification added) (Gallup, 10-11):

(1) They are paying taxes and they do not want to be paying twice, which they would be doing. (Practical)

(2) Way of educating them most practical. (Practical)

(3) It's the best available for the average family. (Practical)

(4) Public schools are everywhere for children to attend. (Practical)

(5) Because public school is what we have. (Practical)

(6) It's the most available and convenient. (Practical)

(7) Better qualified teachers, more up-to-date courses. (School Operation)

(8) Better education with advance teachings. (Academic)

(9) Because of smaller classroom size. (School Operation)

(10) Heterogeneous group racially and religiously. (Social)

(11) There's value in exposure to wide variety of ethnic groups. (Social)

(12) Kids would come in contact with a wider range of students, rich and poor alike. (Social)

(13) It's good for a child to grow up with all kinds of people and not live in a narrow world. (Social)

*(14) Because education is compulsory.[7]

*(15) Children must attend school until they become of age.

*(16) Everyone has to go to school, and it's there for them to use.

*Not classifiable on the "Notre Dame" schema.

Fifty-two (52) percent of the sample responded with one of the first 3 items or variants thereof. Another 36 percent answered via items (4), (5), or (6). Twelve (12) percent responded via items (7) through (9), another 12 percent via items (10), (11), (12), or (13), and 8 percent via one of the final 3 items. Of the 16 items, 9 (numbers 1 through 9) are academic, school operational, and practical in nature (financial considerations and overall convenience being especially prominent); 4 (numbers 10 through 13) are social; and 3 (numbers 14, 15, and 16) are non-classifiable. Gallup data then, appear to concur with diocesan findings regarding reasons for public school enrollment (primarily religious, social, and personal reasons).

Overall, the various diocesan studies (limited in scope to Catholic schools) and the Gallup poll (with the entire nonpublic sector as its unit of analysis) yielded similar findings insofar as perceptions of the distinctive traits of nonpublic and public education are concerned. Generally, the former is perceived as superior on religious, social and personal items, while the latter is attributed primacy on academic, school operational, and practical items. Deviations from the norm, however, are supportive of implications in the Lincoln, Indianapolis, and Boston diocesan studies cautioning against an excessively rigid interpretation of the dichotomous imputation of educational superiority.

A number of other Gallup items also pertained to the perceived comparative distinctiveness and quality of public and nonpublic schools. Upon responding to the following quality item--"If you were to rate the quality of education received by children in your community, which one would you say is best--private, parochial, or public school?"--each respondent was asked to give the reason for his choice. The reason cited most often by those who believed the quality of education was best in private schools was the personal attention directed toward the student

("Personal" on the "Notre Dame" schema). In the case of parochial schools, the reason most frequently offered was discipline (also "Personal" via "Notre Dame" categories). Those supportive of public schools most often gave as their reason the opportunity afforded students to associate with others from all segments of society ("Social" on the "Notre Dame" schema) (Gallup, 3). Quite obviously, Gallup data are congruent with diocesan findings except in the case of public schools where a social reason (as opposed to an academic, school operational, or practical one) is offered.

The Gallup sample was also exposed to the following statement: "If you had the money, or if your children could get free tuition, would you send them to a private school, to a church-related school (parochial), or to a public school?" The responses of those in 3-school communities were as follows (Gallup, 5):

Would send children to private school	30 percent
Would send children to parochial school	29 percent
Would send children to public school	41 percent

When figures for private and parochial schools are combined, the total (59 percent) exceeds that for public schools (41 percent). The size of the difference (a far from overwhelming 18 percent), however, suggests that financial considerations are not the "be all and the end all" of enrollment patterns which they are popularly thought to be.

Additional support for this argument is gained via analysis of the nationwide response to the same question (Gallup, 5):

Would send children to private school	18 percent
Would send children to parochial school	22 percent
Would send children to public school	57 percent
No opinion	3 percent

In this case, 57 percent of the sample indicated that they would continue to enroll their children in public schools. Apparently, Gallup respondents perceived financial considerations as being somewhat crucial for others in their exercise of educational choice (i.e., their response to "What are the chief reasons why parents send their children to public schools?"), but not so for themselves. Diocesan data also failed to reveal any overbearing parental preoccupation with things financial.

Supporters of nonpublic education frequently voice claims of nonpublic school superiority in the provision of a value-oriented instructional format and the inculcation of desirable character traits. Diocesan and Gallup respondents appear to agree insofar as they have attributed superiority to private and parochial schools on most items of a personal nature. Nevertheless, to "clear the air" Gallup respondents were presented with the following: "Suppose a child could attend either a private school or a public school. Which do you think would do a better job in building character and a sense of values--the private school or the public school?" The responses of those in 3-school communities were as follows (Gallup, 11):

The private school	49 percent
The public school	39 percent
No opinion or no answer	12 percent

The above distribution merely supplements response patterns observed elsewhere.

C. Demand: Trends and Projections. Data presented in the Gallup summary do not permit an analysis of trends and a formulation of projections similar to those included in the body of this report.

Footnotes

1. A Study of the American Independent School, "How the Public Views Nonpublic Schools," by Gallup International, 1969.

2. In the Gallup report "parochial" referred to Catholic schools, while "private" denoted independent schools or those affiliated with other (than Catholic) religious denominations.

3. Gallup data reveal an overall lack of knowledge regarding nonpublic schools. When those who lived in communities with private and parochial, as well as public, schools were asked how such schools were supported, slightly more than half ventured a guess (Gallup,2). Only 27 percent cared to guess as to what tuition charges were, and just 11 percent were aware that loans and scholarships were available (Gallup, 2). Evidently, this lack of information is not confined to the nonpublic sector. Gallup International, in conducting a survey of attitudes toward puplic schools for CFK Ltd. (in which the interviewers and sample utilized were identical to those employed in Gallup's nonpublic schools survey), found that 41 percent of those interviewed felt they knew "very little" about public schools in their own community (see CFK Ltd., "A Survey of the Public's Attitudes Toward the Public Schools," by Gallup International, 1969).

4. This relationship is somewhat akin to the direct variation between demand for Catholic schools and use of such schools revealed in the diocesan data. The two are not identical, however, for only a minority of the children in communities with parochial, private, and public schools attend either of the first two. The overwhelming endorsement of nonpublic schools by the residents of such communities, then, is based upon familiarity and not usage (see footnote 17 and section C of Chapter II for a discussion of some social psychological overtones of the direct variation between demand for Catholic schools and respondent utilization of such schools).

5. This item, not classifiable via the "Notre Dame" schema, pertains to the assumed moral imperative to enroll one's children in parochial schools discussed in footnote 32.

6. Insofar as items stressing the maintenance of school order imply the inculcation of self-control and self-discipline, they are classified as "Personal".

7. This item (along with numbers 15 and 16) implies a legal obligation to enroll one's children in some school, and is a generalized version of those items pertaining to a Catholic parent's moral obligation to enroll his children in parochial schools.

APPENDIX B

COSTS AND REVENUES OF NONPUBLIC ELEMENTARY AND SECONDARY EDUCATION: THE PAST, PRESENT, AND FUTURE OF ROMAN CATHOLIC SCHOOLS

CONTENTS

Number of Full-time Religious Teachers in Catholic Elementary Schools, By State for 1967-68, 1968-69, 1969-70 553

Age Distribution of Full-time Religious Classroom Teachers in Catholic Elementary Schools, By State for October 1, 1969 . . . 555

Age Distribution of Full-time Religious Classroom Teachers in Catholic Secondary Schools, By State, for October 1, 1969 . . . 557

Net Value of Contributed Services in Catholic Elementary Schools, By States, for 1967-68, 1968-69, and 1969-70 559

Net Value of Contributed Services in Catholic Secondary Schools, By States, for 1967-68, 1968-69, and 1969-70 561

Estimation Techniques 563

Capital Income and Expenditures in Catholic Elementary Schools, By State, for 1967-68, 1968-69, 1969-70 568

Capital Income and Expenditures in Catholic Secondary Schools, By State, for 1967-68, 1968-69, 1969-70 570

Operating Income and Expenditures in Catholic Elementary Schools, By State, for 1967-68, 1968-69, 1969-70 572

Operating Income and Expenditures in Catholic Secondary Schools, By State, for 1967-68, 1968-69, 1969-70 574

Number of Full-time Religious Teachers in Catholic Elementary Schools, By State for 1967-68, 1968-69, 1969-70.

State	Sisters			Brothers			Scholastics			Religious Priests			Diocesan Priests		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
New England															
Connecticut	1,492	1,408	1,305	0	1	1	0	0	0	0	0	0	23	25	22
Maine	402	348	285	21	17	13	0	0	0	0	0	0	0	0	0
Massachusetts	3,720	3,565	3,259	24	18	28	0	0	0	0	0	0	18	24	29
New Hampshire	569	544	497	0	0	2	0	1	0	0	0	0	0	0	0
Rhode Island	768	713	641	4	4	4	0	0	0	0	0	0	3	3	3
Vermont	259	248	205	0	0	0	0	0	0	0	0	0	0	0	0
Mideast															
Delaware	207	212	198	16	16	18	0	0	0	0	0	0	5	3	2
District of Columbia	662	627	585	6	6	6	0	0	0	0	0	0	11	2	0
Maryland	890	872	818	0	1	1	0	0	0	1	1	1	14	13	11
New Jersey	3,287	3,197	3,072	23	24	22	15	13	12	1	1	1	33	23	25
New York	9,157	8,617	7,683	205	182	189	0	0	0	2	3	4	48	34	50
Pennsylvania	7,145	6,914	6,354	10	8	11	1	1	1	3	1	2	37	36	31
Great Lakes															
Illinois	5,624	5,091	4,672	3	7	7	1	1	1	2	1	0	49	48	65
Indiana	1,401	1,350	1,193	0	0	0	0	0	0	0	0	1	39	33	40
Michigan	2,921	2,772	2,719	0	0	0	0	0	0	0	0	0	0	0	2
Ohio	3,812	3,644	3,374	2	3	5	3	3	6	2	2	4	81	77	69
Wisconsin	2,451	2,270	2,115	0	0	0	0	0	1	0	4	1	134	129	129
Plains															
Iowa	1,182	1,054	960	2	0	0	0	0	0	0	0	0	13	11	0
Kansas	640	613	561	0	0	0	0	0	0	0	0	0	33	27	28
Minnesota	1,904	1,783	1,663	0	0	0	0	0	0	0	0	0	8	10	5
Missouri	1,631	1,548	1,497	0	0	0	1	1	1	0	0	0	107	103	110
Nebraska	547	543	511	0	0	0	0	0	0	1	1	1	32	35	31
North Dakota	221	211	195	0	0	0	0	0	0	2	2	2	11	11	9
South Dakota	209	201	180	0	0	0	0	0	0	1	1	1	2	3	4

Number of Full-time Religious Teachers in Catholic Elementary Schools, By State for 1967-68, 1968-69, 1969-70 (con't.).

State	Sisters			Brothers			Scholastics			Religious Priests			Diocesan Priests		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
Southeast															
Alabama	295	277	257	2	1	1	1	1	1	1	1	0	2	3	0
Arkansas	147	142	130	8	8	8	0	0	0	0	0	0	0	0	0
Florida	732	722	691	0	3	5	0	4	4	1	6	5	24	17	19
Georgia	207	199	179	0	0	0	0	0	0	0	0	0	17	17	16
Kentucky	944	855	763	0	0	0	2	2	1	0	0	0	12	11	11
Louisiana	1,052	1,026	978	22	21	24	0	1	0	3	3	4	18	25	18
Mississippi	173	169	174	0	0	1	0	0	0	5	0	0	3	4	2
North Carolina	220	217	208	1	1	0	0	0	0	0	0	0	1	1	1
South Carolina	156	152	132	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee	183	173	181	0	0	0	0	0	0	0	0	0	0	0	0
Virginia	422	405	386	0	0	0	0	0	0	0	0	0	6	6	2
West Virginia	197	171	158	0	0	0	0	0	0	0	0	1	4	4	8
West and Far West															
Alaska	12	11	10	0	0	0	0	0	0	0	0	0	1	0	2
Arizona	296	288	269	2	2	0	0	0	0	0	0	0	0	0	0
California	3,959	3,734	3,449	4	4	12	4	3	3	4	0	1	0	11	3
Colorado	398	378	369	0	0	0	4	0	0	4	4	3	13	13	14
Hawaii	226	220	208	0	0	0	0	0	0	0	0	0	2	2	0
Idaho	91	84	81	0	0	0	0	0	0	0	0	0	0	0	3
Montana	199	192	152	0	0	0	0	0	0	0	0	0	2	3	2
Nevada	66	66	62	5	5	5	0	0	0	7	7	7	0	0	0
New Mexico	274	227	213	0	0	0	0	0	0	1	1	1	2	2	3
Oklahoma	190	170	168	0	0	0	0	0	0	0	0	0	0	0	0
Oregon	439	400	387	0	0	1	0	0	2	0	0	0	12	11	14
Texas	1,479	1,386	1,322	11	13	9	0	0	0	6	7	5	16	10	6
Utah	50	53	50	0	0	0	0	0	0	0	0	0	1	1	1
Washington	656	620	588	0	0	0	1	1	0	2	2	2	13	12	11
Wyoming	66	57	50	0	0	0	0	0	0	0	0	0	0	0	0

Age Distribution of Full-time Religious Classroom Teachers in Catholic Elementary Schools, By State, for October 1, 1969.

State	Under 20	20-29	30-39	40-49	50-59	60-69	70+
New England							
Connecticut	0	334	260	184	205	138	42
Maine	0	51	53	48	57	54	15
Massachusetts	0	293	230	144	177	169	41
New Hampshire	0	92	102	90	85	73	12
Rhode Island	0	122	134	85	123	78	13
Vermont	0	41	38	40	42	25	6
Mideast							
Delaware	0	59	50	27	27	29	11
District of Columbia	0	148	167	75	90	60	6
Maryland	1	184	195	123	114	105	32
New Jersey	3	836	675	437	455	372	93
New York	1	1,907	1,679	962	1,034	691	170
Pennsylvania	8	843	740	515	712	481	103
Great Lakes							
Illinois	5	1,028	939	607	851	737	235
Indiana	1	280	225	170	244	187	45
Michigan	25	606	427	335	347	219	59
Ohio	2	879	764	454	556	400	80
Wisconsin	0	443	478	324	381	307	88
Plains							
Iowa	6	194	238	170	171	109	32
Kansas	0	88	141	99	93	83	35
Minnesota	0	381	430	249	249	230	38
Missouri	0	424	340	209	215	166	53
Nebraska	0	98	93	81	106	79	23
North Dakota	0	49	49	30	35	26	10
South Dakota	0	37	55	35	32	31	3
Southeast							
Alabama	0	74	60	48	41	23	4
Arkansas	0	0	0	0	0	0	0
Florida	2	247	191	104	63	29	15
Georgia	7	58	39	29	21	12	0
Kentucky	0	134	150	120	121	106	25
Louisiana	0	179	215	166	170	82	22

Age Distribution of Full-time Religious Classroom Teachers in Catholic Elementary Schools, By State, for October 1, 1969 (con't.).

State	Under 20	20-29	30-39	40-49	50-59	60-69	70+
Mississippi	0	37	48	30	32	17	6
North Carolina	0	67	60	34	31	10	2
South Carolina	0	28	41	24	21	20	1
Tennessee	0	43	39	25	36	17	3
Virginia	0	126	96	37	50	37	4
West Virginia	0	26	32	31	32	25	4
West and Far West							
Alaska	0	3	1	3	0	2	0
Arizona	0	61	79	50	41	33	1
California	1	259	284	142	115	53	10
Colorado	0	93	97	58	76	32	5
Hawaii	0	43	64	35	27	17	0
Idaho	0	33	16	10	11	8	1
Montana	0	28	39	30	26	15	4
Nevada	0	0	0	0	0	0	0
New Mexico	0	54	64	39	37	27	7
Oklahoma	0	21	38	29	24	21	3
Oregon	0	85	115	65	60	29	7
Texas	0	318	299	180	233	175	40
Utah	0	3	20	10	8	7	0
Washington	0	160	149	86	96	47	27
Wyoming	0	24	11	5	3	4	2

Age Distribution of Full-time Religious Classroom Teachers in Catholic Secondary Schools, By State, for October 1, 1969

State	Under 20	20-29	30-39	40-49	50-59	60-69	70+
New England							
Connecticut	0	114	150	83	72	32	12
Maine	0	17	22	28	16	7	1
Massachusetts	0	90	143	110	76	34	7
New Hampshire	0	26	42	29	30	20	0
Rhode Island	0	65	61	41	30	17	6
Vermont	0	9	24	19	14	4	2
Mideast							
Delaware	0	22	43	29	13	11	1
District of Columbia	0	60	119	74	54	21	2
Maryland	0	81	103	161	66	37	8
New Jersey	0	230	372	226	229	120	22
New York	0	814	1,172	766	546	319	46
Pennsylvania	0	262	436	278	263	146	27
Great Lakes							
Illinois	0	500	674	518	546	379	97
Indiana	0	110	150	85	71	45	7
Michigan	0	150	273	228	281	160	10
Ohio	0	404	409	304	243	163	40
Wisconsin	0	123	222	146	118	72	13
Plains							
Iowa	0	100	119	95	104	71	20
Kansas	0	34	70	41	52	44	24
Minnesota	0	156	136	75	78	63	3
Missouri	0	210	266	140	168	83	21
Nebraska	0	95	102	81	60	54	39
North Dakota	0	14	17	20	20	13	3
South Dakota	0	14	18	26	18	3	1
Southeast							
Alabama	0	14	11	7	9	6	1
Arkansas	0	0	0	0	0	0	0
Florida	0	73	88	60	28	19	5
Georgia	0	20	33	18	19	7	1
Kentucky	0	114	112	62	95	54	16
Louisiana	2	147	128	110	101	56	8

Age Distribution of Full-time Religious Classroom Teachers in Catholic Secondary Schools, By State, for October 1, 1969 (con't.).

State	Under 20	20-29	30-39	40-49	50-59	60-69	70+
Mississippi	0	25	19	10	10	8	3
North Carolina	0	3	5	6	5	2	0
South Carolina	0	4	17	7	8	7	0
Tennessee	0	28	11	8	21	9	3
Virginia	0	31	64	46	39	25	7
West Virginia	0	15	19	8	17	14	4
West and Far West							
Alaska	0	2	6	4	2	0	0
Arizona	0	23	32	25	14	7	0
California	0	101	128	62	55	35	7
Colorado	0	47	48	46	29	28	1
Hawaii	0	22	27	18	12	2	1
Idaho	0	5	8	9	5	0	0
Montana	0	27	30	37	22	8	1
Nevada	0	0	0	0	0	0	0
New Mexico	0	4	16	14	9	5	0
Oklahoma	0	6	6	10	12	7	0
Oregon	0	0	5	3	2	3	0
Texas	4	113	186	109	94	56	4
Utah	0	7	13	9	6	3	1
Washington	0	56	83	50	36	20	2
Wyoming	0	2	2	2	0	0	0

Net Value of Contributed Services in Catholic Elementary Schools, By States, for 1967-68, 1968-69, and 1969-70.

State	1967-1968	1968-1969	1969-1970
New England			
Connecticut	4,759,787	5,428,434	4,631,726
Maine	1,667,102	1,649,624	1,646,993
Massachusetts	6,950,373	7,906,095	8,416,856
New Hampshire	1,729,084	1,725,832	1,858,153
Rhode Island	2,587,621	2,603,623	2,741,077
Vermont	878,440	911,532	960,494
Mideast			
Delaware	909,850	951,929	986,747
District of Columbia	2,446,596	2,589,042	2,462,441
Maryland	2,816,289	3,012,585	3,056,070
New Jersey	0	0	0
New York	18,790,705	21,660,845	21,502,603
Pennsylvania	6,733,213	7,161,982	7,278,248
Great Lakes			
Illinois	4,104,494	7,976,402	5,139,396
Indiana	3,485,892	3,460,529	3,484,506
Michigan	12,757,883	16,753,607	16,731,182
Ohio	12,745,862	15,412,684	14,321,918
Wisconsin	6,652,428	6,364,172	6,951,728
Plains			
Iowa	3,349,089	3,692,890	4,035,155
Kansas	2,530,561	2,590,954	2,537,074
Minnesota	3,556,081	4,107,991	4,244,771
Missouri	5,055,660	5,315,871	5,551,625
Nebraska	620,378	825,040	754,159
North Dakota	556,194	583,269	625,481
South Dakota	645,905	663,002	621,384
Southeast			
Alabama	761,164	818,262	748,549
Arkansas	0	0	0
Florida	695,742	974,507	1,077,406
Georgia	162,407	524,936	506,752
Kentucky	213,955	250,050	1,764,319
Louisiana	4,296,725	4,387,937	4,115,150
Mississippi	357,047	335,466	336,587

Net Value of Contributed Services in Catholic Elementary Schools, By States, for 1967-68, 1968-69, and 1969-70 (con't.).

State	1967-1968	1968-1969	1969-1970
North Carolina	470,130	561,280	540,206
South Carolina	0	0	0
Tennessee	379,689	556,862	556,507
Virginia	0	955,000	0
West Virginia	869,644	711,173	0
West and Far West			
Alaska	49,554	21,870	56,095
Arizona	509,621	516,338	500,613
California	2,689,200	2,941,609	3,310,819
Colorado	1,149,033	1,214,960	1,211,825
Hawaii	873,118	852,633	848,837
Idaho	102,020	85,611	104,649
Montana	669,051	621,329	247,835
Nevada	0	0	0
New Mexico	25,032	41,914	41,470
Oklahoma	297,767	335,868	380,287
Oregon	1,577,395	1,617,041	1,500,417
Texas	3,247,810	3,043,023	3,026,683
Utah	127,170	129,282	1,268,309
Washington	1,349,736	2,113,242	1,423,433
Wyoming	256,573	251,709	213,417

Net Value of Contributed Services in Catholic Secondary Schools, By States, for 1967-68, 1968-69, and 1969-70.

State	1967-1968	1968-1969	1969-1970
New England			
Connecticut	2,407,537	3,154,738	3,287,612
Maine	485,264	541,790	600,224
Massachusetts	3,479,346	3,739,175	4,912,196
New Hampshire	663,527	618,813	691,703
Rhode Island	847,782	988,963	1,283,387
Vermont	308,500	335,164	413,194
Mideast			
Delaware	243,261	487,114	292,126
District of Columbia	2,293,357	2,187,285	2,178,002
Maryland	1,489,272	1,509,669	2,543,722
New Jersey	0	0	0
New York	10,137,305	15,508,572	16,278,600
Pennsylvania	5,374,872	6,401,302	6,387,179
Great Lakes			
Illinois	25,199,013	26,498,868	27,292,729
Indiana	2,640,833	2,924,974	2,996,719
Michigan	7,402,153	8,703,331	8,120,355
Ohio	8,260,171	9,510,508	10,911,379
Wisconsin	3,400,353	4,003,553	3,535,082
Plains			
Iowa	3,332,826	3,529,270	292,645
Kansas	1,631,614	1,636,625	0
Minnesota	973,266	1,183,712	1,228,656
Missouri	3,982,943	4,708,868	5,037,744
Nebraska	513,540	500,159	617,356
North Dakota	588,895	616,090	621,259
South Dakota	530,740	665,680	723,125
Southeast			
Alabama	339,105	283,671	292,645
Arkansas	0	0	0
Florida	793,748	1,037,140	1,228,656
Georgia	272,468	473,426	430,980
Kentucky	1,483,877	1,589,025	1,652,300
Louisiana	2,758,909	2,973,184	3,120,559

Net Value of Contributed Services in Catholic Secondary Schools, By States, for 1967-68, 1968-69, and 1969-70 (con't.).

State	1967-1968	1968-1969	1969-1970
Mississippi	180,360	192,482	227,099
North Carolina	57,629	54,156	82,498
South Carolina	0	0	0
Tennessee	394,771	407,812	387,332
Virginia	0	1,150,000	0
West Virginia	556,079	466,590	0
West and Far West			
Alaska	81,008	86,721	109,699
Arizona	317,931	330,283	403,913
California	1,548,706	1,632,215	1,679,324
Colorado	554,990	892,744	840,490
Hawaii	438,787	445,699	480,786
Idaho	110,605	122,339	104,763
Montana	511,479	544,920	183,130
Nevada	0	0	0
New Mexico	262,091	275,718	286,276
Oklahoma	137,689	207,266	186,528
Oregon	0	0	0
Texas	2,317,664	2,339,556	2,115,227
Utah	185,189	192,767	189,022
Washington	1,034,173	1,096,361	1,143,340
Wyoming	45,413	47,667	45,800

ESTIMATION TECHNIQUES

1. The supply of Religious Teachers

Prediction of the numbers of religious teachers available is based upon results of a multiple regression equation fit to a time series of numbers of religious teachers in United States Catholic elementary and secondary schools as published by P.J. Kenedy, Official Catholic Directory for the 15 year period, 1956-57 to 1970-71. Using these data and the following variables,

R_t = Absolute number of religious teachers in year t

$R^* = \frac{R_t - R_{t-1}}{R_t}$

T = Time in years,

the regression equation for estimation of the number of religious teachers available for 1975 takes the following values,

$$\begin{array}{lllll} R^* = & .048 & - .012T & + .001T^2 & \\ & (.017) & (.004) & (.0002) & \text{std. error} \\ & 2.76 & -2.74 & 3.76 & \text{t values} \\ & \bar{R}^2 & .70 & & \end{array}$$

A total of 42812 religious teachers is thus predicted for the U.S. in 1975.

Use of this same curve to predict the number of religious teachers for 1980 would result in continued rapid declines to a level of 8437 religious teachers for the entire nation. This result was deemed unreasonable for several reasons. First, for historical and demographic reasons described in the text, departures of active religious from religious orders are not expected to continue at the same rates that have prevailed since the 1965 peak in the national time series of religious teachers used to determine regression coefficients for prediction. If the membership of religious orders should continue to decline at the same high rates of the 1965-70 period, many religious orders would be expected to cease operations before the 1980 predicted levels of membership were reached. Moreover, an examination of second differences in the rates of change within the 1956-70 data series reveals regular decreases in the annual rates of decrease in total numbers of religious teachers.

Finally, it is not possible to specify a satisfactory regression equation to fit a distribution of data that rises to a peak, declines rapidly thereafter, but subsequently levels off at the tail of the distribution. A regression equation that accurately predicts the turning point and the initially steep rate of decline thereafter will not also describe accurately the tail of the distribution. Indeed, when signed values rather than absolute values were used for the dependent variable in the above equation, the fit of the resulting regression was statistically superior to the one used here, especially near the turning point, but the rate of decline thereafter was so great that, for the reasons just stated, the predicted values for both 1975 and 1980 were too low to be considered reliable estimates.

In order to describe a leveling off in the rate of decline in the number of religious teachers, the number of teachers after 1975 was assumed to decline at an annual rate equal to the average annual rate of decline between 1970 and 1975, using for 1975 the number of religious teachers predicted by the above equation. With this straight line method of projection, the number of religious teachers available for the entire country in 1980-81 is estimated to be 20,142.

2. Parish Operating Revenues

Diocesan time series data for ordinary parish revenues were available on a sample basis only. To one set of private data for which sufficient observations were available a regression equation of the form $R_t = f(\log T)$ was fit, where R is total parish revenues in year t, and T is time in years. Estimates for 1970 and 1980 in all dioceses for the "hard times" projections were made by applying to 1970 revenue calculations the percentages of increase for 1975 and 1980 that resulted from the sample data predictions. For the "good times" model parish revenues were assumed to increase at an annual rate of three percent, roughly equal to the mean average annual rate of increase in the time series for the 1971 NCEA survey and in private time series data for the years 1967-71.

3. Required Public Subsidy

The formula used to estimate the required external subsidy per pupil on the basis of cost and revenue projections to 1975 and 1980 is given as:

$$P_t = \frac{S_t}{E_t} = D_t - \left(F_t + \frac{S_{1970}}{R_{1970}} \times R_t \right)$$

where

P_t = Subsidy per pupil in year t

S_t = Total subsidy in year t

E_t = Total enrollment in year t

D_t = Total deficit in year t

F_t = Total user charges, i.e., tuition and fees, in year t

R_t = Total ordinary parish revenues in year t

Values for P,S,E,D, and F are for elementary, secondary or combined operations as indicated in tables and text.

4. Capital Replacement Estimates

Annual capital expenditures for normal replacement of plant and equipment under each of the consolidation strategies are estimated according to the following formula:

$$C_t = \frac{V\,(.06)^n}{L} \cdot \frac{E_t}{E_{1970}} \cdot \frac{P_{1970}}{P_t}$$

where,

C_t = annual capital replacement costs per pupil in year t.

V = reproduction value of plant and equipment based upon adjusted 1969-70 NCEA data for assessed value of land and buildings.

L = average life of buildings, assumed to be forty years.

E_t = enrollment in year t.

P_t = pupil/teacher ratio in year t.

Capital Income and Expenditures in Catholic Elementary Schools, By State, for 1967-68, 1968-69, 1969-70.

State	Capital Income			Expenditures on Land			Expenditures on Buildings and Additions			Expenditures on Remodeling and Improvement			Expenditures on Furniture and Equipment			Debt Retirement		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
New England																		
Conn.	244,798	259,816	170,950	163	36,500	85,500	663,080	412,180	430,213	686,968	640,136	467,731	371,062	342,445	286,593	1,234,101	1,174,979	971,280
Maine	59,824	75,783	68,700	0	0	0	0	0	0	83,017	86,333	53,720	53,720	19,005	13,945	532	243	243
Mass.	121,527	283,077	280,477	140,000	4,750	2,500	1,164,443	586,410	2,000	474,773	523,533	1,060,102	373,371	328,912	144,081	340,727	582,124	382,191
N. H.	37,336	40,509	37,930	0	0	0	678,105	111,570	1,900	310,393	241,327	204,437	73,690	63,595	39,002	182,495	203,363	196,169
R. I.	442,732	185,268	147,249	153,586	5,989	3,586	3,187,296	4,909	140,000	461,846	265,543	308,618	306,230	95,173	76,851	803,313	804,872	727,191
Vt.	24,793	18,245	5,588	20,000	20,000	20,000	0	0	0	43,147	78,434	54,003	30,835	23,693	17,650	109,759	145,861	159,734
Mideast																		
Del.	51,361	50,894	126,000	300	0	0	6,025	534,800	20,800	395,464	155,785	147,757	42,010	63,927	87,396	29,458	55,479	45,350
D.C.	96,764	172,700	148,560	46,568	43,837	21,064	1,233,000	196,565	2,327,035	263,770	331,474	334,803	161,805	121,297	186,274	722,431	867,390	560,619
Md.	319,036	421,075	469,835	96,806	93,815	88,313	1,805,905	2,171,837	1,078,792	223,642	216,567	443,092	185,425	270,184	219,717	845,420	879,784	742,614
N. J.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N. Y.	1,538,484	923,690	895,806	293,745	179,655	27,800	2,278,289	1,398,433	1,238,645	458,451	5,517,382	2,563,295	340,417	1,178,212	851,634	1,354,345	3,599,691	4,338,377
Pa.	410,894	1,113,370	1,475,369	431,684	666,218	460,764	447,763	2,846,607	3,446,727	1,463,236	1,714,541	1,878,786	232,397	803,878	514,325	958,559	3,056,446	1,142,735
Great Lakes																		
Ill.	503,052	87,671	430,735	344,463	0	666,500	4,844,493	160,622	1,318,562	1,312,717	109,082	926,534	306,453	105,738	297,459	1,664,916	391,482	1,198,707
Ind.	581,017	472,054	421,235	229,618	29,354	14,900	2,289,088	1,396,963	190,418	886,070	538,256	659,815	257,037	251,095	277,622	1,277,231	1,020,000	1,063,236
Mich.	11,551	46,895	15,350	3,960	9,847	0	344,399	79,889	30,600	106,075	217,245	95,449	78,885	118,141	53,070	245,779	295,545	124,066
Ohio	1,667,987	2,026,618	1,950,396	261,164	195,554	142,678	3,391,070	5,155,742	2,337,708	1,110,252	1,830,367	1,226,857	777,491	836,914	687,958	2,735,389	3,012,386	2,543,369
Wisc.	584,059	614,621	538,496	90,206	67,157	106,867	565,360	624,831	835,228	580,807	625,140	622,634	296,148	379,519	400,882	2,541,751	2,666,438	2,264,804
Plains																		
Iowa	551,105	580,558	398,780	20,524	8,672	8,250	478,687	104,069	539,862	213,861	277,028	234,856	97,866	99,335	89,795	1,021,894	844,510	612,167
Kansas	262,993	206,062	153,600	9,900	7,143	2,760	1,091,875	869,230	73,501	156,532	1,230,621	1,192,262	106,678	174,970	122,170	288,058	343,425	277,431
Minn.	421,895	409,885	480,385	25,284	1,784	4,760	300,000	0	246,000	181,355	344,313	239,387	255,740	109,727	111,393	778,789	800,559	725,190
Mo.	405,795	460,736	673,261	23,936	0	6,928	499,425	1,006,520	196,300	385,816	475,944	420,989	287,403	378,286	312,474	1,592,866	1,939,508	1,297,663
Neb.	12,390	11,780	18,739	0	0	1,000	3,500	151,000	500	64,551	46,186	33,674	15,744	21,035	20,905	198,528	99,353	225,971
N. Dak.	211,529	206,657	20,522	0	0	0	0	0	0	34,796	47,749	46,305	28,570	31,942	32,871	159,811	194,855	182,359
S. Dak.	24,064	27,047	20,000	2,994	0	6,000	302,371	20,598	15,000	25,024	61,833	39,098	11,783	17,995	41,555	28,543	48,402	45,000
TOTALS				2,330,556	2,076,063	1,822,210	31,311,304	24,305,943	17,496,855	12,076,543	18,498,218	19,107,878	5,731,646	7,192,493	5,924,332	24,251,878	30,100,789	24,535,250

Capital Income and Expenditures in Catholic Elementary Schools, By State, for 1967-68, 1968-69, 1969-70 (con't.).

State	Capital Income			Expenditures on Land			Expenditures on Buildings and Additions			Expenditures on Remodeling and Improvement			Expenditures on Furniture and Equipment			Debit Retirement		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
Southeast																		
Ala.	24,510	93,770	34,405	863	9,309	50,000	77,883	25,155	378,900	62,849	68,491	90,748	43,569	60,956	64,561	220,331	161,892	259,904
Ark.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fla.	30,273	42,238	40,923	0	7,000	20,500	350,230	540,452	56,000	145,467	167,792	141,821	36,250	76,332	57,122	347,666	554,769	221,047
Ga.	2,434	37,516	26,300	0	0	0	0	0	304,000	35,348	88,325	103,075	8,649	15,087	44,967	208,880	223,261	259,832
Ky.	17,724	34,992	16,175	3,000	18,000	0	142,470	7,000	6,000	9,159	3,208	125,400	7,863	11,362	29,515	81,621	93,381	59,138
La.	107,551	246,130	268,620	0	39,050	7,600	1,069,407	780,767	630,069	149,390	161,864	198,292	100,868	129,178	121,089	719,097	832,379	809,355
Miss.	50,520	43,446	45,753	0	25,000	0	32,375	10,000	49,344	19,829	24,376	87,360	881	9,368	16,105	32,774	56,368	48,950
N. C.	52,482	66,576	47,008	1,125	1,500	1,950	15,000	10,000	7,500	178,826	53,906	46,017	31,079	38,148	29,190	299,653	308,725	323,117
S. C.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tenn.	93,777	42,524	43,100	606	0	1,000	483,631	20,594	294,350	51,171	52,604	83,579	43,961	43,532	65,264	229,042	191,175	47,000
Va.	0	0	0	0	0	0	0	200,000	0	0	0	0	0	0	0	0	0	0
W. Va.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West and Far West																		
Alaska	7,226	8,532	25,000	0	0	0	16,829	20,693	0	1,500	3,400	424	1,469	1,982	2,700	31,791	23,612	22,800
Ariz.	19,589	65,655	15,379	0	60,265	10,090	142,335	168,770	3,000	57,779	73,696	41,819	59,453	60,947	24,562	154,066	153,231	154,900
Calif.	142,955	204,746	149,302	34,000	207,000	12,000	170,196	369,459	327,188	328,456	279,343	251,234	136,955	144,479	135,960	244,545	241,397	221,991
Colo.	265,963	288,645	196,599	0	21,783	0	907,575	114,203	7,760	84,870	111,446	72,370	109,288	44,909	35,495	283,460	426,607	496,054
Hawaii	99,120	59,460	58,473	0	0	0	186,363	115,000	70,375	221,312	109,572	62,505	92,514	81,191	66,130	95,500	296,500	138,150
Idaho	8,401	6,502	7,696	2,088	7,212	3,000	0	0	0	8,078	29,502	11,500	10,436	10,460	11,620	58,540	51,580	55,700
Mont.	29,538	17,482	17,071	18,000	11,000	15,500	402,000	20,240	0	44,711	26,551	31,118	13,183	8,251	9,498	100,829	129,511	61,801
Nevada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N. Mex.	52,686	129,993	78,620	1,953	570	500	9,754	96,546	1,200	31,578	15,172	24,395	17,190	17,046	4,250	98,876	121,171	82,002
Okla.	106,520	138,136	107,850	13,000	5,000	0	48,389	173,512	11,330	48,389	173,512	0	7,856	38,843	3,591	43,700	67,749	64,843
Oregon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas	397,005	782,000	383,586	11,987	33,590	27,000	1,300,994	1,002,864	833,846	269,578	368,910	254,610	251,478	287,271	232,760	1,232,123	1,461,852	1,064,639
Utah	5,500	5,167	6,567	0	0	0	0	0	0	7,734	13,371	10,167	5,945	9,552	9,434	27,449	21,410	25,103
Wash.	22,669	56,875	97,000	49,033	61,576	2,900	381,699	179,036	46,102	407,796	305,333	4,189,884	97,853	126,314	69,642	627,240	412,375	257,458
Wyo.	0	2,000	0	0	0	0	0	7,000	0	10,160	19,596	27,356	4,228	8,232	5,255	0	2,755	0

Capital Income and Expenditures in Catholic Secondary Schools, By State, for 1967-68, 1968-69, 1969-70.

State	Capital Income			Expenditures on Land			Expenditures on Buildings and Additions			Expenditures on Remodeling and Improvement			Expenditures on Furniture and Equipment			Debt Retirement		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969 1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1868-1969	1969-1970	1967-1968	1968-1969	1969-1970
New England																		
Conn.	414,858	324,844	221,012	45,748	9,448	8,000	672,482	522,750	15,000	296,570	146,818	97,200	234,115	188,424	191,786	315,315	320,971	212,503
Maine	24,514	30,727	237,585	0	0	235,222	9,194	13,324	47,880	3,994	12,750	16,900	6,538	20,377	8,915	0	7,800	9,800
Mass.	40,657	30,540	34,908	0	0	0	50,000	3,460	36,300	124,324	116,908	128,824	91,569	84,254	64,821	308,646	325,824	342,575
N. H.	21,206	38,222	24,500	0	49	50	2,420	7,932	1,000	11,745	15,530	27,500	14,514	15,441	14,606	220,057	228,617	221,057
R. I.	128,491	87,033	97,717	0	1,500	1,500	390,000	24,000	20,000	84,906	110,854	56,700	53,304	34,357	41,546	350,232	239,563	229,700
Vt.	2,800	1,200	0	0	0	0	4,381	4,031	4,400	1,525	695	2,000	6,072	6,266	8,100	86,377	66,914	98,308
Mideast																		
Del.	76,095	146,405	72,500	400	400	400	235,000	1,400,000	300,000	40,209	80,720	16,900	19,369	25,129	5,300	78,300	83,900	67,500
D.C.	460,389	351,516	120,533	20,500	10,900	12,000	364,183	92,435	31,000	209,388	136,389	107,550	139,579	204,209	151,366	501,267	585,989	606,885
Md.	102,517	190,436	371,572	2,138	1,162	1,000	219,008	0	2,000	156,321	225,850	266,800	114,490	135,163	184,935	444,854	547,465	372,350
N.J.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N.Y.	296,290	570,832	415,260	9,730	582,443	71,250	222,258	768,076	358,700	399,987	1,032,896	753,943	263,460	529,930	449,727	557,086	1,614,618	1,466,402
Pa.	129,910	875,259	303,850	0	102,085	5,250	645,679	1,012,251	23,140	571,248	813,343	663,255	460,773	993,276	261,760	120,279	482,947	326,862
Great Lakes																		
Ill.	950,024	495,475	795,203	36,000	58,000	25,000	1,932,050	1,674,040	1,256,000	825,647	1,226,336	1,057,067	318,660	352,636	342,502	604,123	546,573	841,414
Ind.	182,722	205,697	258,600	1,116	56,400	40,000	1,506,000	220,000	0	109,194	522,647	71,006	179,303	114,504	85,428	289,032	224,968	165,914
Mich.	2,471	1,322,354	2,015,000	0	4,456	0	0	3,112,524	0	33,438	90,296	39,300	11,951	503,216	27,635	164,333	199,008	260,667
Ohio	1,252,311	2,248,282	1,542,240	36,212	87,878	161,284	1,829,063	2,163,630	4,776,538	344,810	979,621	472,164	566,660	495,118	653,126	1,357,077	2,173,141	1,227,764
Wis.	1,392,140	626,437	471,905	3,411	153	5,650	1,821,911	789,478	83,280	100,032	190,442	153,859	161,877	302,557	93,135	616,812	484,395	625,860
Plains																		
Iowa	178,346	176,042	68,034	0	12,500	0	241,074	0	500	118,156	48,508	48,488	109,789	99,431	85,334	272,106	293,938	279,284
Kan.	109,141	485,619	364,225	22,506	5,515	0	1,500	1,005,167	4,000	115,963	395,962	77,385	53,028	101,573	57,227	67,500	46,570	46,570
Minn.	23,303	28,143	20,000	0	0	0	44,201	0	0	19,037	23,411	82,786	36,587	30,771	31,167	276,796	405,106	295,981
Mo.	667,924	657,314	603,100	5,093	1,708	7,200	294,149	780,777	1,309,177	181,475	247,359	225,430	322,439	200,240	181,800	646,958	619,845	560,969
Neb.	98,457	100,561	99,108	0	0	0	164,294	3,009	500	46,446	18,407	9,856	17,000	119,170	18,068	230,652	305,719	229,371
N. Dak.	5,460	3,045	6,400	0	0	0	0	64,000	1,000	8,008	5,673	7,400	4,981	6,720	8,200	31,177	34,071	29,080
S. Dak.	414,872	374,379	0	0	0	0	317,408	0	0	5,000	11,485	3,000	119,945	20,413	8,000	152,445	192,444	100,000

Capital Income and Expenditures in Catholic Secondary Schools, By State, for 1967-68, 1968-69, 1969-70 (con't.).

State	Capital Income			Expenditures on Land			Expenditures on Buildings and Additions			Expenditures on Remodeling and Improvement			Expenditures on Furniture and Equipment			Debt Retirement		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
Southeast																		
Ala.	123,552	14,896	11,775	11,000	0	0	179,995	6,586	7,000	12,467	19,613	200,450	6,545	2,952	6,325	0	0	0
Ark.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fla.	66,339	355,895	198,200	0	0	0	385,000	150,000	65,000	27,167	73,873	124,641	58,217	101,970	109,595	102,024	289,655	311,199
Ga.	311,746	103,957	106,800	0	16,000	0	63,750	192,000	7,000	22,326	34,849	155,350	28,510	31,082	16,300	276,530	160,690	166,180
Ky.	762,307	380,842	454,367	19,000	0	3,812	389,866	20,033	22,000	77,372	104,410	253,884	71,223	48,000	89,800	381,220	360,366	234,076
La.	279,414	454,681	937,400	4,500	11,100	24,500	986,706	1,387,499	3,064,558	378,704	382,656	728,104	191,589	202,525	248,485	281,202	313,080	820,108
Miss.	77,159	30,065	76,000	45	46	50	47,041	22,916	74,000	9,063	10,316	17,000	11,979	10,316	16,118	91,416	97,184	95,000
N.C.	4,396	6,732	1,000	0	0	0	0	0	0	12,317	13,879	3,000	2,232	4,384	1,350	7,046	7,031	7,042
S.C.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tenn.	67,580	92,297	11,616	1,645	1,260	1,000	0	0	0	9,526	14,879	11,831	37,807	41,607	16,292	52,435	41,607	3,323
Va.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W. Va.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West and Far West																		
Alaska	8,521	11,400	35,000	0	0	0	0	0	0	8,660	3,158	5,400	3,881	5,321	10,721	20,400	21,822	20,321
Ariz.	33,293	103,938	31,526	0	0	0	0	46,000	0	3,864	13,970	16,077	10,998	16,572	18,671	50,490	72,584	41,669
Calif.	732,338	225,901	491,001	56,479	69,526	50,000	1,224,904	57,794	237,684	132,367	146,950	112,707	266,510	142,091	214,884	170,115	209,238	128,023
Colo.	191,294	238,356	244,874	650	1,617	1,342	5,338	0	0	13,167	40,468	16,300	11,844	22,733	66,474	236,011	254,017	244,589
Hawaii	74,180	82,711	133,371	0	0	0	173,902	31,625	0	113,333	65,710	83,075	36,576	55,435	46,700	110,000	21,000	72,677
Idaho	10,000	13,000	1,000	0	0	0	314	0	200	400	500	200	1,470	1,800	1,000	10,000	10,000	0
Mont.	38,525	40,359	20,170	0	0	0	0	0	0	13,154	33,973	29,250	9,022	19,127	9,227	68,188	57,250	10,250
Nev.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
N. Mex.	0	3,383	8,383	102,434	30,800	3,000	1,224,791	25,823	76,595	752	5,723	152,846	123,776	14,685	24,191	61,000	61,000	50,000
Okla.	1,500	2,400	3,000	0	1,000	0	0	107,390	2,500	0	107,390	2,500	2,320	21,420	7,500	3,444	2,560	2,560
Oregon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Texas	473,449	583,897	464,737	29,000	0	9,000	1,214,970	799,376	657,500	152,933	132,586	571,824	105,228	177,776	279,998	281,445	397,921	350,522
Utah	15,036	21,000	23,103	0	0	0	140,000	0	0	6,454	7,082	10,573	40,334	3,550	21,654	0	0	0
Wash.	236,763	550,773	216,120	2,970	5,648	31,500	1,129,711	282,446	22,000	112,253	125,199	56,050	44,447	70,938	61,900	61,552	127,302	57,352
Wyo.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	23,163	22,291	22,000
TOTALS				410,577	1,071,594	698,010	18,132,543	17,010,378	12,506,652	4,913,702	7,790,084	6,936,375	4,370,511	5,558,757	4,243,669	9,979,105	12,556,984	11,253,687

Operating Income and Expenditures in Catholic Elementary Schools, By State, for 1967-68, 1968-69, 1969-70.

State	Tuition			Fees			Student Services			Other			Total Operating Expenditures		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
New England															
Connecticut	2,561,043	3,030,417	3,593,201	400,513	407,068	393,984	219,065	203,954	208,643	517,491	579,965	688,485	11,481,582	13,275,281	14,689,981
Maine	90,894	141,825	167,016	37,854	56,585	46,056	111,940	106,015	119,115	44,321	52,017	60,071	1,777,110	2,060,882	2,336,236
Massachusetts	1,150,441	1,311,523	1,377,242	147,050	183,079	168,097	219,065	155,422	123,935	138,904	181,369	177,143	1,856,662	2,148,056	2,611,224
New Hampshire	435,696	535,059	622,481	145,349	152,347	135,553	23,601	24,951	21,310	82,871	114,648	89,605	2,142,097	2,393,688	2,690,222
Rhode Island	1,008,538	1,203,553	1,403,451	200,970	226,147	206,039	65,173	59,880	58,844	85,107	170,598	116,238	4,004,555	3,680,490	4,092,081
Vermont	161,661	174,272	195,103	25,840	31,402	25,608	6,304	6,061	7,450	22,342	22,606	15,169	1,090,938	1,201,048	1,154,177
Mideast															
Delaware	627,402	651,892	708,484	63,811	80,948	94,799	30,291	33,978	33,622	106,445	118,337	47,934	1,832,490	2,076,630	2,285,129
Dist. of Columbia	2,499,393	2,780,574	3,422,734	354,826	355,637	363,580	376,374	407,019	414,284	158,942	186,201	155,050	6,384,427	7,174,271	8,168,184
Maryland	975,736	1,017,329	1,240,019	223,976	224,095	224,753	0	0	0	170,509	194,302	200,125	3,251,478	3,552,523	3,930,561
New Jersey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	604,864	16,261,582	21,287,815	186,945	2,276,925	2,375,546	363,527	5,491,087	4,914,759	98,305	3,166,719	2,489,050	3,331,390	97,741,478	110,583,439
Pennsylvania	819,253	1,405,140	1,659,302	599,566	4,402,205	1,465,328	559,485	1,518,319	1,066,152	528,779	3,108,793	850,512	8,031,817	24,841,436	22,974,566
Great Lakes															
Illinois	2,178,455	23,970,323	2,654,437	1,014,120	1,111,311	1,421,517	1,014,120	518,759	531,603	406,836	441,125	431,873	10,371,346	11,674,936	14,758,760
Indiana	1,088,627	1,240,884	1,548,386	751,561	816,498	790,415	408,218	418,168	302,911	238,809	260,900	274,810	10,863,313	12,303,999	12,990,011
Michigan	5,252,326	6,473,401	7,953,969	537,120	747,561	664,090	2,202,322	2,947,237	2,533,571	565,479	1,077,442	766,045	30,077,673	38,341,453	36,514,815
Ohio	1,419,313	3,786,567	1,981,498	2,021,107	2,189,496	2,151,122	1,007,011	1,106,843	996,756	1,611,655	1,827,537	1,796,614	24,110,758	28,496,763	25,526,214
Wisconsin	1,173,001	1,623,935	1,950,858	1,315,162	1,284,058	1,229,455	561,870	579,150	488,218	468,510	541,967	604,489	15,422,305	18,182,811	20,588,549
Plains															
Iowa	104,249	16,946	153,898	647,078	217,234	799,969	343,055	336,160	350,823	283,893	318,290	303,745	4,931,991	5,838,907	6,465,121
Kansas	479,585	535,845	479,032	355,348	405,811	379,018	172,617	186,022	193,918	207,709	212,780	220,476	4,632,713	5,307,017	5,213,400
Minnesota	307,976	388,244	430,894	249,822	297,229	288,824	195,398	225,812	200,739	285,712	409,677	267,938	15,512,898	17,680,416	18,669,296
Missouri	2,362,108	2,727,989	2,994,614	1,437,892	1,721,364	1,932,104	436,923	467,770	459,684	263,915	335,218	229,113	8,687,977	10,684,030	11,382,815
Nebraska	87,424	113,714	135,169	171,253	152,158	135,169	37,734	45,815	40,425	22,518	25,076	46,324	849,249	944,582	1,033,316
North Dakota	124,420	145,370	130,571	89,637	232,708	92,852	45,295	46,223	34,013	62,643	56,940	62,286	1,273,279	1,440,480	1,680,907
South Dakota	56,830	67,997	82,792	45,083	142,406	147,350	34,364	37,876	34,464	60,611	13,327	13,629	801,903	1,185,587	1,341,457
Southeast															
Alabama	749,379	845,908	1,040,923	109,263	116,759	136,296	178,574	210,157	223,870	93,685	77,422	70,077	1,973,436	2,290,034	2,623,152
Arkansas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Income and Expenditures in Catholic Elementary Schools, By State, for 1967-68, 1968-69, 1969-70 (con't.),

State	Tuition			Fees			Student Services			Other			Total Operating Expenditures		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
Florida	1,685,723	2,644,218	2,847,467	172,478	336,342	279,489	73,572	148,732	131,217	30,442	140,974	151,864	4,348,195	6,789,158	6,857,894
Georgia	860,805	968,047	1,212,397	137,973	148,457	156,987	161,921	158,051	257,125	34,083	51,287	95,309	1,670,227	1,877,578	2,207,025
Kentucky	90,891	110,067	315,658	75,507	71,396	100,690	100,163	101,607	1,180,119	53,934	17,082	61,527	878,747	934,586	8,198,511
Louisiana	5,547,870	5,962,136	6,458,052	481,906	624,387	717,467	202,894	313,602	312,601	414,807	753,901	652,590	10,777,452	12,392,342	14,450,386
Mississippi	260,838	331,429	385,230	41,904	39,139	41,716	43,680	62,730	65,879	27,779	33,973	24,982	699,444	806,910	904,637
North Carolina	498,718	498,744	481,317	48,727	61,864	47,632	27,920	35,183	38,040	10,903	11,143	10,152	760,686	815,363	835,984
South Carolina	0	615,071	615,071	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee	2,527,523	713,460	814,060	185,703	118,616	145,158	72,975	130,211	129,011	96,440	105,659	90,489	3,124,799	2,213,039	2,385,783
Virginia	0	2,399,373	4,488,064	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia	60,097	91,163	0	132,567	140,294	0	0	0	0	137,120	103,442	0	1,247,208	1,409,065	0
West and Far West															
Alaska	33,313	30,320	21,400	2,392	2,364	428	6,919	7,603	5,000	0	0	0	59,577	69,670	52,680
Arizona	399,466	566,985	740,361	66,364	84,349	119,794	90,636	88,827	107,831	14,952	25,837	31,817	1,242,689	1,454,720	1,473,765
California	3,427,192	4,291,417	3,966,032	705,570	668,631	677,875	120,346	135,927	116,690	475,514	514,218	494,027	6,436,181	8,270,522	7,533,744
Colorado	679,341	724,349	776,384	220,324	230,579	230,976	103,199	95,374	97,280	31,717	50,761	47,350	3,145,597	3,605,215	3,923,202
Hawaii	1,075,475	1,249,735	1,454,476	245,982	260,952	293,575	104,749	101,056	97,917	73,756	71,268	69,102	1,800,000	2,145,457	2,221,032
Idaho	6,790	8,615	6,559	1,655	1,650	2,090	0	0	0	15,089	17,792	12,550	37,041	37,129	34,600
Montana	247,596	248,039	265,887	79,186	76,039	54,299	17,668	28,786	49,942	62,961	81,462	44,222	1,399,830	1,399,288	1,233,020
Nevada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico	599,305	639,444	617,621	900	923	800	14,962	13,521	16,000	214,365	170,522	152,740	1,290,452	1,490,248	1,430,240
Oklahoma	273,778	311,404	307,907	90,970	95,844	82,041	0	0	0	43,077	70,511	60,420	929,082	1,111,926	996,584
Oregon	588,481	648,577	688,388	195,245	192,606	208,770	32,624	23,965	21,001	78,801	93,486	77,260	2,728,762	2,908,052	3,125,895
Texas	5,004,813	5,632,418	6,110,703	769,553	802,537	815,870	621,135	649,325	586,657	557,424	653,099	603,644	10,816,361	11,809,675	12,586,987
Utah	126,625	143,615	101,640	16,032	15,380	15,248	22,928	20,424	18,400	32,225	22,762	16,550	348,758	382,044	268,124
Washington	1,039,232	1,165,815	1,223,820	201,071	235,005	225,949	35,177	55,330	30,293	77,516	119,796	111,503	3,202,953	3,805,987	3,862,949
Wyoming	35,719	70,109	46,990	26,480	29,618	25,630	34,184	26,945	28,666	10,700	39,192	10,900	308,618	498,527	380,858
TOTALS													231,946,046	385,226,363	445,968,013

Operating Income and Expenditures in Catholic Secondary Schools, By State, for 1967-68, 1968-69, 1969-70.

State	Tuition			Fees			Student Services			Other			Total Operating Expenditures		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
New England															
Connecticut	5,066,435	5,963,267	7,795,101	191,997	237,193	225,258	349,462	408,816	215,950	339,972	382,866	263,552	7,362,650	8,845,690	10,344,716
Maine	415,256	404,658	473,459	42,606	33,297	27,202	160,660	155,727	121,408	20,824	34,322	56,856	615,989	827,557	810,770
Massachusetts	1,956,288	2,136,425	2,673,521	91,155	153,815	137,030	186,518	225,983	215,562	258,547	264,467	229,765	1,593,804	1,791,825	1,956,992
New Hampshire	484,954	508,357	610,320	27,384	32,945	29,828	115,664	111,462	105,235	56,495	76,531	62,500	902,379	998,793	1,070,558
Rhode Island	1,296,963	1,832,098	2,008,683	97,393	126,708	277,756	278,339	231,469	153,884	40,007	80,360	48,950	1,700,122	1,888,649	2,096,370
Vermont	136,777	136,294	184,000	27,480	28,770	22,490	720	895	900	8,774	5,577	9,900	461,755	468,758	566,983
Mideast															
Delaware	513,501	617,331	694,994	334,804	396,352	44,141	11,613	27,707	15,070	96,749	195,707	66,023	1,304,014	1,495,780	1,631,723
Dist. of Columbia	5,335,947	5,089,773	5,652,328	298,696	313,440	371,349	845,948	779,398	962,456	501,160	616,636	531,776	6,629,574	7,424,417	7,893,729
Maryland	4,031,538	4,946,558	5,875,079	225,031	215,554	235,750	206,667	211,934	192,428	561,587	539,641	495,706	5,918,552	6,647,238	7,807,227
New Jersey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New York	1,815,449	25,395,382	30,273,022	171,017	1,855,513	2,150,583	405,685	3,259,164	3,839,728	198,480	2,204,143	2,684,687	6,953,578	47,203,472	54,460,296
Pennsylvania	2,289,566	4,733,706	5,327,369	3,749,428	5,280,509	1,276,599	2,577,560	3,317,297	1,846,727	2,540,552	5,032,788	1,690,902	8,889,969	16,417,555	16,829,051
Great Lakes															
Illinois	39,906,346	41,736,336	44,691,388	543,806	535,491	523,424	6,344,757	6,735,389	7,100,287	1,393,276	1,930,652	1,589,592	52,024,445	55,680,991	58,403,854
Indiana	3,346,173	3,647,154	4,335,382	373,092	430,154	462,572	718,407	735,242	734,055	529,048	606,818	565,553	6,666,861	7,932,061	8,802,385
Michigan	5,538,677	7,441,651	7,798,747	1,800,959	2,363,991	2,379,398	2,326,375	2,113,292	1,566,954	615,123	1,065,359	370,892	14,935,814	20,513,473	18,970,943
Ohio	11,413,381	13,180,591	15,832,100	1,633,675	1,753,105	1,847,903	2,251,560	2,254,586	2,195,091	1,496,815	1,837,910	1,911,653	18,298,851	21,559,552	24,630,757
Wisconsin	5,956,608	6,429,133	6,900,113	379,798	434,045	476,740	818,965	869,424	677,084	1,347,745	1,574,341	1,185,669	9,696,922	11,197,620	11,655,550
Plains															
Iowa	1,472,016	1,867,504	1,933,876	463,572	601,669	627,496	360,458	335,297	338,751	607,478	653,297	524,637	4,665,064	5,454,803	5,861,885
Kansas	1,375,751	1,467,347	1,561,689	240,327	220,896	260,505	465,822	490,140	444,457	203,092	195,218	176,410	2,809,535	3,026,082	3,147,787
Minnesota	743,890	891,828	805,545	150,335	159,066	149,963	517,480	517,561	495,187	82,278	170324	189,750	7,476,985	8,518,549	9,764,748
Missouri	7,341,635	7,993,779	8,604,793	690,787	1,057,373	911,280	1,223,368	1,319,933	1,268,221	1,173,791	1,129,037	993,707	11,551,988	12,895,257	12,529,425
Nebraska	217,394	267,023	311,023	86,461	87,784	83,962	28,430	73,056	72,500	85,304	84,613	93,200	1,307,918	1,574,604	1,677,161
North Dakota	217,307	286,698	296,385	27,253	29,152	31,100	60,272	67,976	55,940	77,529	79,309	84,900	528,783	711,906	717,716
South Dakota	197,709	223,980	187,200	152,060	163,285	142,420	19,027	35,911	4,797	118,154	75,159	29,400	625,148	693,533	623,069
Southeast															
Alabama	350,131	438,642	519,950	37,550	37,773	33,680	15,427	19,295	13,198	20,986	5,464	4,240	918,529	1,041,457	1,157,534
Arkansas	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Income and Expenditures in Catholic Secondary Schools, By State, for 1967-68, 1968-69, 1969-70 (con't.).

State	Tuition			Fees			Student Services			Other			Total Operating Expenditures		
	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970	1967-1968	1968-1969	1969-1970
Florida	1,664,919	2,349,457	3,215,297	153,058	406,572	309,190	236,392	241,658	264,651	366,905	548,012	426,429	4,022,144	5,754,332	6,792,893
Georgia	484,778	919,980	1,078,361	34,713	94,462	101,338	37,110	92,582	96,503	55,755	171,669	188,133	737,945	1,586,970	1,777,503
Kentucky	2,147,702	2,364,560	2,356,669	107,294	126,319	131,638	279,252	281,139	297,439	133,620	163,533	105,302	271,460	278,812	3,998,609
Louisiana	6,519,071	7,527,430	8,728,652	595,452	640,174	840,470	277,914	265,525	270,728	1,105,560	1,528,318	1,251,345	9,516,016	11,177,345	12,531,706
Mississippi	233,521	284,238	311,025	10,923	29,447	29,557	151,682	161,893	192,000	45,849	43,282	28,200	531,863	709,042	869,073
No. Carolina	119,683	150,203	201,216	9,167	11,507	16,912	18,614	17,908	15,000	66,096	38,035	36,310	287,667	313,253	338,139
So. Carolina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tennessee	557,503	621,549	703,691	84,586	103,568	102,545	29,515	27,566	29,040	85,576	90,750	57,681	1,340,916	1,561,726	1,652,967
Virginia	0	1,448,081	0	0	0	0	0	0	0	0	0	0	0	1,921,017	0
West Virginia	243,078	243,726	0	95,830	87,323	0	0	0	0	111,314	106,570	0	943,793	968,372	0
West and Far West															
Alaska	80,363	83,769	46,100	8,494	8,722	9,000	1,492	1,810	1,924	76,333	49,604	17,100	193,789	173,611	99,764
Arizona	717,986	735,035	709,345	60,814	94,315	92,483	168,639	91,481	67,140	185,048	110,307	136,883	1,668,868	1,642,702	1,837,854
California	2,972,697	8,368,370	3,819,434	333,393	1,323,684	442,440	261,617	2,021,583	325,188	456,278	2,112,082	657,923	5,685,193	17,221,913	7,543,540
Colorado	875,725	1,433,697	1,547,005	93,312	135,144	148,303	243,231	384,393	344,429	215,326	284,271	282,191	1,714,854	3,021,524	3,138,851
Hawaii	1,237,794	1,437,037	1,631,550	100,539	152,683	156,126	111,209	117,470	16,621	99,855	74,792	74,613	1,742,900	2,000,000	2,200,000
Idaho	18,056	16,128	20,000	15,737	15,329	14,950	32,324	19,029	10,000	3,583	4,611	2,434	83,862	81,357	87,027
Montana	397,694	454,213	437,376	51,176	35,922	25,413	46,901	50,619	50,100	82,332	136,478	79,056	986,482	1,222,033	1,095,566
Nevada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Mexico	269,346	353,403	442,125	42,831	40,010	46,773	76,571	87,036	78,540	43,552	43,104	24,895	606,321	669,767	717,602
Oklahoma	562,954	565,089	566,563	40,787	46,787	46,820	0	0	0	59,610	73,911	82,276	777,358	868,064	884,745
Oregon	713,494	814,362	925,272	59,191	66,070	74,160	41,112	53,727	56,824	107,023	169,574	194,904	1,193,531	1,479,082	1,776,598
Texas	3,359,125	4,050,572	4,791,608	437,909	525,351	555,957	486,128	530,176	574,188	1,094,816	1,245,752	1,248,751	5,729,404	6,777,548	7,876,279
Utah	178,477	119,115	183,567	34,819	42,749	45,439	17,975	25,177	38,113	65,804	63,562	42,775	505,633	529,362	546,728
Washington	1,295,050	1,614,326	1,750,595	331,707	226,815	206,710	111,987	104,723	85,100	242,189	280,920	272,279	2,091,475	2,765,999	2,972,569
Wyoming	15,923	22,882	20,000	7,330	11,738	9,600	0	0	0	14,200	14,200	14,200	102,901	116,309	137,600
TOTALS													214,573,604	307,641,762	322,286,842

APPENDIX C

THE ESTIMATED MARGINAL COSTS OF ABSORBING ALL NONPUBLIC STUDENTS INTO THE PUBLIC SCHOOL SYSTEM

CONTENTS

Estimation of School Age Population by State in Central City SMSA, Other SMSA, and Outside SMSA 577

Residence of School Age Population by Central City SMSA, Other SMSA, and Non-SMSA, for Each State, Elementary and Secondary, 1970 581

Estimated Public School Pupils and Classroom Teachers Outside SMSA, in Central City SMSA, and in Other SMSA, by State, 1969 583

Cost Calculation for the State-by-State and the State-Regional Analysis 585

"Estimation of School Age Population by State in Central City SMSA, Other SMSA, and Outside SMSA"

Source: Census of Population, 1970, Advanced Reports; PC (v2) Series, General Population Characteristics.

Legend and Comments:

T_1= Absolute numbers (totals) of children of the State of x who are 5-13 or 14-17 (see top of worksheet).

Note All whole numbers are noted in the terms of hundreds. Eg. $T_1 = 2749$ means 274,900. Figures abstracted from the Advanced Reports were done in units of 100's.

ET_1 SMSA= Total absolute number of children of the State x age 5-13 or 14-17 who reside in SMSA's of State x.

ET_2= Total absolute number of children of the State of x; age 5-13 or 14-17 who reside in Central Cities of SMSA's of State x.

A = Proportion of children of State x, age 5-13 or 14-17 who reside outside of SMSA's in State x.

If those children who reside in SMSA's are referred to as "the metropolitan population," A would, in essence, constitute the non-metropolitan population. It should not be assumed that this population is non-urban since a proportion of this non-metropolitan population live in places of 10,000 and over which are not Central Cities of an SMSA. Consequently, this non-metropolitan population can not be referred to as rural in a strict sense.

B= Proportion of children aged 5-13 or 14-17 of State __x__ who reside in Central Cities of SMSA's in that state. This proportion of all children of the state aged 5-13 or 14-17 can confidently be referred to as the metropolitan population in the strictest sense. The figures are as accurate as the Advanced Reports permits, which in the vast majority of instances are those that appear in the final reports of the census.

C= Proportion of children aged 5-13 or 14-17 of State __x__ who reside in the SMSA's of that state but outside the Central City(ies) the SMSA's. Quite loosely, this residence is referred to as the urban fringe or more loosely, the suburban population. The urban fringe is probably more accurate, since the concept refers to those children residing outside Central Cities in SMSA's in a melange of residence types: towns, rural-nonfarm and farm.

D= Proportion of children age 5-13 or 14-17 in the SMSA's of State __x__ who reside in the Central Cities of the SMSA's. This figure differs from that of C in that the denominator is the number of children 5-13, or 14-17 in SMSA's rather than for the total State. This figure serves as a means of estimating just how "suburban" the metropolitan ring C is, as well as how "rural the non-metropolitan population A is. This is a crude approximation, but may permit a finer distinction and analysis on a state-by-state basis in a few cases. For example, the data for the State of New Jersey, in the age group 5-13 indicates:

non metro = 0.251
metro = 0.117
metro ring = 0.630
D = 0.157

Since the metropolitan population reside in the Central Cities there appears to be no problem. The questions that remain are how "rural" is the non-metro and how "suburban" the metro ring? In noting that only 15 percent D of the population of the SMSA's reside in the Central Cities, 85 percent outside, suggests that the area of the SMSA is rather densely populated with few pockets of rural non-farm areas population. Thus, the term "suburban" population is quite appropriate for the metro ring of New Jersey, and residually, the "non-metro" is quite rural, though probably non-farm. The same line of reasoning would hold for states like Delaware, Rhode Island, etc. In the case of North Dakota, 67 percent D reside in the Central Cities while 33 percent reside in the metro ring. Here the metro ring is not truly "suburban", although the non-metro is very "rural". This would also hold true for states such as Montana, West Virginia, etc.

Table A-1

Residence of School Age Population by Central City SMSA, Other SMSA, and Non-SMSA, for Each State, Elementary and Secondary, 1970

State	School Age Population: 5-13				School Age Population: 14-17			
	Proportion of State School age Children located outside SMSA	Proportion of State School age Children located in Central City(ies)	Proportion of State School age Children located in SMSA outside Central City(ies)	Proportion of SMSA School age Children located in Central City(ies)	Proportion of State School age Children located outside SMSA	Proportion of State School age Children located in Central City(ies)	Proportion of State School age Children located in SMSA outside Central City(ies)	Proportion of SMSA School age Children located in Central City(ies)
Alaska	--	--	--	--	--	--	--	--
Ala.	0.476	0.246	0.277	0.470	0.483	0.246	0.270	0.476
Ariz.	0.279	0.453	0.266	0.630	0.276	0.461	0.262	0.461
Ark.	0.680	0.134	0.185	0.419	0.703	0.126	0.170	0.425
Calif.	0.076	0.326	0.596	0.353	0.082	0.319	0.598	0.347
Colo.	0.278	0.296	0.424	0.411	0.301	0.300	0.398	0.429
Conn.	0.183	0.342	0.491	0.397	0.185	0.311	0.503	0.382
Del.	0.296	0.119	0.584	0.169	0.289	0.125	0.585	0.177
D.C.	--	--	--	--	--	--	--	--
Fla.	0.327	0.264	0.407	0.393	0.332	0.267	0.400	0.400
Ga.	0.510	0.206	0.282	0.422	0.526	0.211	0.262	0.446
Hawaii	0.183	0.349	0.467	0.427	0.209	0.375	0.414	0.475
Idaho	0.850	0.092	0.057	0.617	0.853	0.090	0.055	0.619
Ill.	0.199	0.328	0.471	0.410	0.201	0.333	0.465	0.417
Ind.	0.380	0.321	0.297	0.519	0.384	0.343	0.271	0.558
Iowa	0.633	0.220	0.146	0.600	0.660	0.202	0.137	0.595
Kan.	0.544	0.253	0.201	0.558	0.568	0.241	0.189	0.560
Ky.	0.590	0.152	0.256	0.372	0.619	0.141	0.239	0.371
La.	0.466	0.278	0.255	0.521	0.472	0.297	0.230	0.563
Me.	0.796	0.115	0.087	0.567	0.773	0.122	0.103	0.541
Md.	0.154	0.217	0.627	0.257	0.160	0.220	0.619	0.262
Mass.	0.161	0.269	0.569	0.320	0.159	0.269	0.571	0.320
Mich.	0.183	0.578	0.291	0.291	0.243	0.245	0.510	0.324
Minn.	0.436	0.188	0.375	0.333	0.496	0.188	0.314	0.374
Miss.	0.826	0.097	0.075	0.565	0.840	0.089	0.069	0.561
Mo.	0.336	0.275	0.388	0.414	0.361	0.268	0.370	0.420
Mont.	0.752	0.171	0.076	0.692	0.776	0.157	0.066	0.703
Neb.	0.559	0.322	0.117	0.732	0.603	0.301	0.094	0.301
Nev.	0.198	0.380	0.421	0.474	0.230	0.380	0.389	0.490

Table A-1

Residence of School Age Population by Central City SMSA, Other SMSA, and Non-SMSA, for Each State, Elementary and Secondary, 1970 (Continued)

State	School Age Population: 5-13				School Age Population: 14-17			
	Proportion of State School age Children located outside SMSA	Proportion of State School age Children located in Central City(ies)	Proportion of State School age Children located in SMSA outside Central City(ies)	Proportion of SMSA School age Children located in Central City(ies)	Proportion of State School age Children located outside SMSA	Proportion of State School age Children located in Central City(ies)	Proportion of State School age Children located in SMSA outside Central City(ies)	Proportion of SMSA School age Children located in Central City(ies)
N. H.	0.726	0.186	0.086	0.682	0.749	0.180	0.070	0.718
N. J.	0.251	0.117	0.630	0.157	0.240	0.147	0.611	0.194
N. M.	0.701	0.224	0.074	0.750	0.705	0.221	0.072	0.753
N. Y.	0.148	0.439	0.412	0.516	0.146	0.445	0.408	0.521
N. C.	0.634	0.174	0.190	0.477	0.659	0.165	0.174	0.487
N. D.	0.893	0.071	0.035	0.671	0.895	0.063	0.041	0.607
Ohio	0.228	0.259	0.511	0.336	0.234	0.286	0.478	0.374
Okla.	0.478	0.310	0.210	0.596	0.510	0.288	0.200	0.589
Ore.	0.398	0.204	0.396	0.340	0.408	0.210	0.380	0.356
Pa.	0.208	0.259	0.533	0.328	0.214	0.252	0.533	0.320
R. I.	0.019	0.326	0.654	0.332	0.013	0.307	0.679	0.311
S. C.	0.620	0.069	0.310	0.182	0.637	0.074	0.288	0.204
S. D.	0.854	0.106	0.039	0.731	0.864	0.095	0.039	0.708
Tenn.	0.505	0.345	0.149	0.698	0.513	0.345	0.142	0.707
Tex.	0.247	0.476	0.275	0.633	0.276	0.473	0.250	0.654
Utah	0.230	0.218	0.551	0.283	0.238	0.230	0.530	0.303
Vt.	--	--	--	--	--	--	--	--
Va.	0.381	0.223	0.394	0.361	0.408	0.215	0.375	0.364
Wash.	0.341	0.215	0.442	0.327	0.364	0.222	0.412	0.350
W. Va.	0.701	0.104	0.193	0.350	0.706	0.103	0.190	0.352
Wis.	0.426	0.270	0.302	0.472	0.445	0.264	0.290	0.476
Wyo.	--	--	--	--	--	--	--	--

Source: 1970 Census of Population, General Population Characteristics, PC (V 2), U. S. Department of Commerce, Bureau of the Census, Advance Report for individual states.

Table A-II

Estimated Public School Pupils and Classroom Teachers Outside SMSA, in Central City SMSA, and in Other SMSA, by State, 1969

State	Pub. School Enrol. 1969 EP	% School Age Outside SMSA	No. of Pub. School Pup. Outside SMSA	% School Age Central City SMSA	No. of Pub. School Pup. Central City SMSA	% School Age Other SMSA	No. of Pub. School Pup. Other SMSA	P/T69 Outside SMSA	P/T69 Central City SMSA	P/T69 Other SMSA	1969 Classroom Teach. Outside	1969 Classroom Teach. Central City	1969 Classroom Teach. Other
Conn.	634,932	18.40	116,828	32.07	203,623	49.52	314,418	20.3	19.8	21.0	5,755	10,284	14,972
Del.	130,471	29.41	38,372	12.10	15,787	58.48	76,299	27.0	21.3	23.0	1,421	741	3,317
Me.	238,360	79.04	188,400	11.74	27,983	9.22	21,977	19.9	22.2	17.0	9,467	1,260	1,293
Md.	890,232	15.64	139,232	21.86	194,605	62.50	556,395	---	---	---	---	---	---
Mass.	1,143,430	16.08	183,863	26.90	307,583	57.02	651,984	21.0	21.8	21.8	8,755	14,109	29,907
N.H.	152,188	73.30	111,554	18.47	28,109	8.23	12,525	19.6	23.6	21.1	5,691	1,191	594
N.J.	1,454,378	24.81	360,831	12.67	184,270	62.52	909,277	22.0	24.6	21.5	16,401	7,491	42,292
N.Y.	3,442,809	14.80	509,536	44.12	1,518,967	41.09	1,414,650	22.9	23.3	23.3	22,250	65,192	60,714
Pa.	2,346,002	21.01	492,895	25.75	604,095	53.24	1,249,012	23.4	24.1	21.4	21,064	25,066	58,365
R.I.	180,159	1.79	3,225	32.05	57,741	66.16	119,193	---	21.0	21.5	154	2,750	5,544
Ver.	108,362	---	---	---	---	---	---	---	---	---	---	---	---
Ill.	2,324,516	20.03	465,601	32.97	766,393	47.00	1,092,522	23.2	26.7	22.8	20,069	28,704	47,918
Ind.	1,223,686	38.18	467,203	32.84	401,858	28.97	354,502	23.7	24.8	23.9	19,713	16,204	14,833
Iowa	659,888	64.15	423,318	21.46	141,612	14.38	94,892	21.1	25.4	22.5	20,062	5,575	4,217
Kansas	517,360	55.24	285,790	25.02	129,443	19.74	102,127	22.4	23.8	23.3	12,758	5,439	4,383
Mich.	2,165,766	20.14	436,185	24.02	520,217	55.84	1,209,364	25.5	29.0	26.6	17,105	17,938	45,465
Minn.	913,910	45.43	415,189	18.83	172,089	35.74	326,631	22.0	23.7	23.7	18,872	7,261	13,782
Mo.	1,030,853	34.41	354,717	27.32	281,629	38.27	394,507	22.0	25.3	24.0	16,123	11,132	16,438
Neb.	330,813	57.28	189,490	31.64	104,669	11.07	36,621	19.9	27.1	26.6	9,522	3,862	1,377
N.D.	147,782	89.39	132,102	6.92	10,227	3.69	5,453	24.3	22.6	---	5,436	452	241
Ohio	2,423,831	23.08	559,420	26.76	648,617	50.16	1,215,794	25.7	25.0	24.4	21,767	25,945	49,828
S.D.	166,735	85.76	142,992	10.32	17,207	3.92	6,536	22.9	21.8	22.9	6,244	789	285
Wisc.	980,064	43.24	423,780	26.87	263,343	29.89	292,941	23.7	25.5	23.7	17,881	10,327	12,360
Ala.	825,072	47.84	394,714	24.63	203,215	27.53	227,142	24.8	27.3	25.5	15,916	7,444	8,907
Ark.	406,085	68.76	279,224	13.16	53,441	18.08	73,420	27.1	24.2	24.7	10,303	2,208	2,972
Fla.	1,408,095	32.91	463,404	26.55	373,849	40.54	570,842	22.6	24.3	24.4	20,505	15,385	23,395
Ga.	1,112,416	51.56	573,562	20.79	231,271	27.65	307,583	26.5	25.0	25.6	21,644	9,251	12,015
Ky.	703,712	59.98	422,086	14.91	104,923	25.12	176,772	23.7	24.1	23.2	17,809	4,354	7,619
La.	853,766	46.84	399,904	28.38	242,299	24.78	211,563	23.5	23.8	24.6	17,017	10,181	8,600
Miss.	575,284	83.10	478,061	9.53	54,825	7.37	42,398	25.0	21.3	25.2	19,122	2,574	1,682

Table A-II

Estimated Public School Pupils and Classroom Teachers Outside SMSA, in Central City SMSA, and in Other SMSA, by State, 1969 (con't.).

State	Pub. School Enrol. 1969 EP	% School Age Out-side SMSA	No. of Pub. School Pup. Outside SMSA	% School Age Cen-tral City SMSA	No. of Pub. School Pup. Central City SMSA	% School Age Other SMSA	No. of Pub. School Pup. Other SMSA	P/T69 Out-Side SMSA	P/T69 Central City SMSA	P/T69 Other SMSA	1969 Class-room Teach. Outside	1969 Class-room Teach. Central City	1969 Class-room Teach. Other
N.C.	191,174	64.24	122,810	17.18	32,844	18.58	35,520	26.2	24.6	26.8	4,687	1,335	1,325
S.C.	648,182	62.59	405,697	7.07	45,826	30.34	196,658	25.9	26.9	25.9	15,664	1,704	7,593
Tenn.	891,414	50.75	452,393	34.51	307,627	14.73	131,305	26.7	25.4	26.7	16,944	12,111	4,918
Va.	1,076,664	39.00	419,899	22.12	238,158	38.87	418,499	23.6	22.8	23.6	17,792	10,445	17,733
W. Va.	401,366	70.32	282,241	10.41	41,782	19.27	77,343	24.6	22.3	24.6	11,473	1,874	3,144
Alaska	77,993	---	---	---	---	---	---	---	---	---	---	---	---
Ariz.	418,069	27.87	116,516	45.61	190,681	26.53	110,914	21.1	24.0	23.1	5,522	7,945	4,801
Calif.	4,660,000	7.84	365,344	32.42	1,510,772	59.74	2,783,884	25.3	26.1	25.4	14,440	57,884	109,602
Colo.	537,281	26.51	142,433	29.79	160,056	41.70	224,046	22.1	23.2	24.9	6,445	6,899	8,998
Hawaii	178,448	19.08	34,048	35.71	63,724	45.20	80,658	---	24.3	---	---	2,622	---
Idaho	179,873	85.12	153,108	9.20	16,548	5.68	10,217	23.2	26.7	22.8	6,599	620	448
Mont.	174,864	75.95	132,809	16.73	29,255	7.32	12,800	24.5	25.7	---	5,421	1,138	---
Nev.	123,694	20.70	25,605	38.06	47,078	41.24	51,011	---	26.3	22.1	---	1,790	2,308
N.M.	279,686	70.27	196,535	22.34	62,482	7.38	20,641	23.6	26.7	21.6	8,328	2,340	956
Okla.	612,374	48.89	299,390	30.38	186,039	20.73	126,945	24.9	28.2	26.5	12,024	6,597	4,790
Ore.	478,386	40.20	192,311	20.66	98,835	39.14	187,240	22.0	23.2	21.3	8,741	4,260	8,791
Texas	2,662,467	25.62	682,124	47.56	1,266,269	26.81	713,807	24.2	28.2	24.2	28,187	44,903	29,496
Utah	302,813	23.28	70,495	22.22	67,285	54.49	165,003	26.7	28.3	26.7	2,640	2,378	6,180
Wash.	820,482	34.90	286,348	21.78	178,701	43.31	355,351	26.4	26.4	26.4	10,846	6,769	13,460
Wyo.	86,440	---	---	---	---	---	---	---	---	---	---	---	---
D.C.	149,054	---	---	---	---	---	---	---	---	---	---	---	---

Cost Calculation for the State-by-State and the State-Regional Analysis

The determination of the marginal costs of absorbing nonpublic students into the public school system required three distinct steps: the determination of excess capacity, the net number of students to be absorbed, and the appropriate per pupil costs to be applied to each new registrant.

The Determination of Excess Capacity

The first step taken in the determination of excess capacity was to examine the changes in public school enrollments. It became quite evident that the declining birth rates were reflected in elementary and to a lesser extent, secondary enrollments. Indeed, in twenty-one states and the District of Columbia total elementary enrollments have begun to decline. At the secondary level ten states have experienced declining enrollments.[1] It is important to note that the declining enrollments are most evident in the lower grades. Thus, even in those states where total elementary and secondary enrollments were increasing, enrollments in the lower grades were declining.

The sheer loss of students in some sense, generates excess capacity which could be used to absorb nonpublic students. That is, if all things remain unchanged in the State of Mississippi from 1966 until 1970, the loss of 38,097 elementary students would indicate that 38,097 empty seats were available to nonpublic students. Thus one "crude" estimate of excess capacity that was calculated measured the difference between peak enrollments in elementary and secondary schools and the current enrollments in elementary and secondary schools. In this case, no excess capacity was noted unless there had been an absolute decline in enrollments.[2]

This "crude" estimation of excess capacity perhaps could be used as a rough bench-mark. The implicit assumption that all other things remained constant was too severe to generate realistic cost calculations.

The most important variable assumed to be held constant in the "crude excess capacity" formula, was the pupil/teacher ratio. A relatively small change in the pupil/teacher ratio substantially altered the number of students that the public school system could accommodate. If a State's enrollment remained constant over the six year period under investigation, but its pupil/teacher ratio constantly fell, then the state could accommodate more students by reverting to a higher pupil/teacher ratio.

The cost of accommodating more students, by raising the pupil/teacher ratio is not an explicit dollar cost but rather it is the implicit cost of reduced educational effectiveness associated with a larger number of students per teacher. This implicit cost might be accepted by the affected school districts if their financial plight were severe. Indeed, many urban areas if confronted with the burden of educating all the nonpublic students in their districts would have little choice in the matter if tax and debt instruments were fully exploited. Other school districts might generate some new monies but resort to higher pupil/teacher ratios in order to accommodate the influx of nonpublic students.

Thus it would appear likely that at least part of the cost of absorbing nonpublic students would be affected by increases in pupil/teacher ratios. The greatest capacity could be achieved--and thus the lowest absorption costs--by reverting to the highest possible pupil/teacher ratio. Although extraordinary pupil/teacher ratios would not be acceptable to the public in general and to the teaching profession in particular, it could be assumed that pupil/teacher ratios would rise to levels which were experienced during the past six years. The "high excess capacity" estimate was therefore based upon this assumption.

The "high excess capacity" was determined by first isolating the highest pupil/teacher ratio which existed during the past six years. This ratio was then multiplied times the number of teachers in the base year.[3] The product of the highest pupil/teacher ratio (P/TH) times the number of teachers in 1970 (T_{1970}) or the appropriate base year equalled the "high capacity" estimate. When enrollment in the base year was deducted from the "high capacity" estimate, the high excess capacity was generated.

Although the "high excess" capacity estimate is a realistic projection for many parts of the county, it was felt that the sacrifice involved with returning to high pupil/teacher ratios may be politically and educationally unacceptable in other parts of the country. Thus a third estimate, the "low excess capacity" was calculated. This formulation attempts to avoid excessively high pupil/teacher ratios by depending primarily upon recent experience. One exception to this rule applied to those cases where enrollments have peaked. In these cases, the pupil/teacher ratio associated with the peak year enrollment was employed. This exception attempted to reflect the maximum pupil/teacher ratio that the school districts in question might accept readily.

The procedure used to estimate "low excess capacity" employed the pupil/teacher ratio associated with the peak year enrollment or the pupil/teacher ratio for the year immediately preceding the base year.[4] This ratio was then applied to the number of teachers available in the base year. The resulting product of the pupil/teacher ratio in the peak year or preceding year (P/T_p) times the number of teachers in the base year (T_{1970}) equalled the "low capacity" estimate. The "low excess capacity" estimate was then determined by subtracting the current enrollment from the "low capacity" estimate.

It should be noted that the "low capacity" estimate could be greater than or less than the "current capacity"--the enrollment in the base year. If pupil/teacher ratios were higher in the base year than they were in the peak year or preceding year, an over-utilization of capacity was noted. This result was quite consistent with the basic assumptions of the model. That is, a higher pupil/teacher ratio in the base year indicated a more intense utilization of the existing plant than in the peak or preceding year. Thus if recent experience with pupil/teacher ratios was accepted as the appropriate norm, the higher pupil/teacher ratio in the base year must represent an over-utilization of capacity compared to the norm.

The excess capacity calculations are found in Table A-III through A-VI. The State-by-State analysis in Table A-III and A-IV indicated that total capacity in elementary schools in the United States was 2,251,295 under the "high capacity" estimate, 839,784 under the "low capacity" estimate and 343,449 under the "crude capacity" estimate. The total excess capacity available at the

Table A-III

Excess Capacity in Secondary Public Schools, State by State, 1970.

State	Public School Enrollment 1970 (E_P)	Total Class-room Teachers 1970 (T_{1970})	For Peak Year Enrollment or for 1969 $(P/T)_P$	Highest P/T since 1965 (P/T)	High Capacity $(P/T)_H XT$	Crude Capacity High Enroll-ment (E_H)	Low Capacity $(P/T)_P XT_{1970}$	High Excess Capacity $[(P/T)_H XT_{1970}] - E_P$	Crude Excess Capacity $E_H - E_P$	Low Excess Capacity $[P/T)_P XT_{1970}] - E_P$
Conn.[1&2]	230,000	13,000	'69 - 17.69	'65 - 19.91	258,830	230,000	'69- 229,970	28,830	0	-30
Del.	59,155	3,010	'69 - 20.80	'68 - 21.49	64,685	59,155	'70- 62,608	5,530	0	3,453
Maine	66,290	3,790	'69 - 17.45	'67 - 18.33	69,470	66,290	'70- 66,136	3,180	0	-154
Md.	390,525	19,610	'69 - 19.50	'65 - 21.69	425,341	390,525	'70- 382,395	34,816	0	-8,130
Mass.	515,000	24,493	'69 - 20.83	'68 - 21.70	531,498	515,000	'70- 510,189	16,498	0	-4,811
N.H.	64,132	3,190	'69 - 20.33	'66 - 20.60	65,714	64,132	'70- 64,853	1,582	0	721
N.J.	503,880	29,069	'69 - 17.93	'65 - 18.77	545,625	503,880	'70- 521,207	41,445	0	17,327
N.Y.	1,554,842	86,217	'69 - 17.73	'65 - 18.93	1,632,088	1,544,842	'70-1,528,627	77,246	0	-26,215
Pa.	1,098,100	52,900	'69 - 20.84	'65 - 22.67	1,199,243	1,098,100	'70-1,102,436	101,143	0	4,336
R.I.	76,933	4,450	'69 - 18.72	'66 - 20.30	90,335	77,631	'69- 88,304	13,402	698	11,371
Vt.	41,290	2,555	'69 - 15.87	'65 - 21.79	55,673	41,290	'70- 40,548	14,383	0	-742
Ill.	851,303	42,940	'69 - 19.87	'65 - 19.93	855,794	851,303	'70- 853,218	4,491	0	1,915
Ind.	547,668	25,204	'69 - 21.88	'67 - 22.77	573,895	547,688	'70- 551,464	26,227	0	3,796
Iowa	192,951	14,804	'69 - 12.79	'65 - 16.00	236,864	192,951	'70- 189,343	43,913	0	-3,608
Kans.	210,198	12,818	'68 - 19.99	'68 - 19.99	256,232	213,584	'68- 256,232	46,034	3,386	46,034
Mich.	951,783	51,543	'69 - 17.97	'65 - 24.95	1,285,998	951,783	'70-1,926,228	334,215	0	-25,555
Minn.	437,400	23,440	'69 - 18.93	'65 - 20.87	489,193	437,400	'70- 443,719	51,793	0	6,319
Mo.	271,000	13,411	'69 - 20.29	'68 - 20.73	278,010	271,000	'70- 272,109	7,010	0	1,109
Nebr.	138,000	8,200	'69 - 16.91	'65 - 18.38	150,716	139,574	'69- 138,662	12,706	1,574	662
N.D.	46,572	2,529	'68 - 18.70	'66 - 18.71	47,318	46,943	'68- 47,292	746	371	720
Ohio	693,329	48,121	'69 - 14.46	'65 - 17.10	822,869	693,612	'69- 695,830	129,540	283	2,501
S.D.	51,300	2,913	'69 - 17.05	'65 - 20.08	58,493	51,300	'70- 49,666	7,193	0	-1,634
Wisc.	409,376	23,094	'69 - 17.96	'65 - 19.70	454,952	409,376	'70- 414,768	45,576	0	5,392
Ala.	378,996	16,881	'69 - 22.45	'65 - 24.61	415,441	386,087	'69- 378,978	36,445	7,091	-18
Ark.	211,274	10,033	'69 - 20.96	'65 - 23.53	236,076	211,274	'70- 210,292	24,802	0	-982
Fla.	646,193	30,153	'69 - 21.75	'65 - 22.94	691,710	646,193	'70- 655,828	45,517	0	9,089
Ga.	400,000	18,930	'69 - 21.09	'66 - 22.44	424,789	400,000	'70- 399,234	24,789	0	-766
Ky.	259,000	11,811	'69 - 22.23	'65 - 23.92	282,519	259,000	'70- 262,559	23,519	0	3,559
La.	333,484	17,000	'69 - 19.40	'65 - 21.18	360,060	333,484	'70- 329,800	26,576	0	-3,684
Miss.[1&2]	242,000	10,300	'69 - 23.50	'66 - 25.24	259,972	242,000	'69- 242,000	17,972	0	0
N.C.	356,448	16,243	'69 - 22.13	'65 - 24.40	396,329	356,448	'70- 359,458	39,881	0	3,010

Table A-III

Excess Capacity in Secondary Public Schools, State by State, 1970 (continued).

State	Public School Enrollment 1970 (E_P)	Total Classroom Teachers 1970 (T1970)	For Peak Year Enrollment or for 1969 $(P/T)_P$	Highest P/T since 1965 (P/T)	High Capacity $(P/T)_H$ XT	Crude Capacity High Enrollment (E_H)	Low Capacity $(P/T)_P XT_{1970}$	High Excess Capacity $[(P/T)_H XT_{1970}] - E_P$	Crude Excess Capacity $E_H - E_P$	Low Excess Capacity $[P/T)_P XT_{1970}] - E_P$
S. C.	263,300	12,700	'68 - 21.22	'65 - 22.91	290,957	263,419	'68- 269,494	27,657	119	6,194
Tenn.	328,669	14,250	'69 - 22.92	'65 - 26.25	374,062	328,669	'70- 326,610	45,393	0	-2,059
Va.[1&2]	424,600	21,100	'69 - 20.12	'65 - 21.79	459,769	424,600	'69- 424,600	35,169	0	0
W. Va.	177,751	7,865	'65 - 27.99	'65 - 27.99	220,141	188,680	'65- 220,141	42,390	10,929	2,330
Alaska	28,831	1,472	'69 - 21.12	'69 - 21.12	31,089	28,831	'70- 31,089	2,258	0	2,258
Ariz.	133,000	5,778	'69 - 23.26	'68 - 23.90	138,094	133,000	'70- 134,396	5,094	0	1,396
Calif.	1,764,000	72,000	'69 - 24.79	'69 - 24.79	1,784,880	1,764,000	'70-1,784,880	20,880	0	0
Colo.	242,768	11,537	'69 - 20.53	'70 - 21.04	242,768	242,768	'70- 236,855	0	0	-5,913
Hawaii	79,000	3,093	'69 - 25.66	'65 - 27.64	85,491	79,000	'70- 79,366	6,491	0	366
Idaho	89,492	4,006	'69 - 22.11	'65 - 22.63	90,656	89,492	'70- 88,573	1,164	0	-919
Mont.	67,653	3,500	'69 - 20.79	'67 - 22.59	79,065	67,653	'70- 72,765	11,412	0	5,112
Nev.	53,798	2,304	'69 - 23.11	'70 - 23.35	53,798	53,798	'70- 53,245	0	0	-553
N. M.	130,637	5,530	'69 - 23.43	'65 - 23.91	132,222	130,637	'70- 129,568	1,585	0	-1,069
Okla.[1]	276,952	13,374	'69 - 19.47	'66 - 22.22	297,170	276,952	'70- 260,392	20,218	0	-16,560
Oregon	201,700	9,700	'69 - 20.45	'65 - 21.74	210,878	201,700	'70- 198,365	9.178	0	-3,335
Texas	729,700	57,300	'69 - 12.88	'65 - 14.47	829,131	729,700	'70- 738,024	99,431	0	8,324
Utah	138,516	5,500	'69 - 24.68	'70 - 25.18	138,516	138,516	'70- 135,740	0	0	-2,776
Wash.	375,094	15,900	'69 - 23.60	'65 - 25.07	398,613	375,094	'70- 375,240	23,519	0	146
Wyo.	40,284	2,280	'69 - 18.14	'65 - 18.55	42,294	40,284	'70- 41,359	2,010	0	1,075
D. of C.	55,271	3,129	'69 - 18.00	'65 - 21.36	66,835	55,800	'69- 56,322	11,564	529	1,051

[1] NCES data were substituted for NEA data due to inconsistencies

[2] Base year 1969

Source: Estimates of School Statistics, 1965-66 through 1970-71. Research Division - National Education Association, Tables 2 and 5; Fall Statistics of Public Schools, 1965 through 1970. Office of Education - U. S. Department of Health, Education and Welfare.

Table A-IV

Excess Capacity in Elementary Public Schools, State by State, 1970.

State	Public School Enrollment 1970 (E_P)	Total Classroom Teachers 1970 (T_{1970})	For Peak Year Enrollment or for 1969 $(P/T)_P$	Highest P/T since 1965 (P/T)	High Capacity $(P/T)_H XT$	Crude Capacity High Enrollment (E_H)	Low Capacity $(P/T)_P XT_{1970}$	High Excess Capacity $[(P/T)_H XT_{1970}] - E_P$	Crude Excess Capacity $E_H - E_P$	Low Excess Capacity $[(P/T)_P XT_{1970}] - E_P$
Conn.	471,677	18,700	'69 - 25.39	'65 - 27.78	519,486	471,677	'70 - 474,793	47,809	0	3,116
Del.	23,590	3,024	'69 - 24.94	'67 - 26.98	81,588	73,764	'69 - 75,419	7,998	174	1,829
Me.	175,500	7,380	'69 - 23.64	'67 - 26.17	193,135	175,500	'70 - 174,463	17,635	0	-1,037
Md.	519,969	21,201	'69 - 24.04	'65 - 26.81	568,399	519,969	'70 - 509,672	48,430	0	-10,297
Mass.	663,000	26,948	'69 - 23.83	'66 - 25.34	682,862	663,000	'70 - 642,171	19,862	0	-20,829
N.H.	94,624	3,935	'69 - 24.76	'65 - 27.69	108,960	94,624	'70 - 97,431	14,336	0	2,807
N.J.	978,120	41,831	'69 - 24.03	'65 - 26.16	1,094,299	978,120	'70 - 1,005,199	116,179	0	27,079
N.Y.	1,922,174	91,918	'68 - 22.85	'65 - 24.31	2,234,527	1,986,462	'68 - 2,100,326	312,353	64,288	178,152
Pa.	1,260,000	55,900	'69 - 23.32	'65 - 28.24	1,578,616	1,267,059	'69 - 1,303,588	318,616	7,059	43,588
R.I.	111,157	4,538	'69 - 22.62	'65 - 26.50	120,257	111,157	'70 - 102,650	9,100	0	-8,507
Vt.	71,412	3,027	'69 - 22.49	'66 - 26.12	79,065	71,412	'70 - 68,077	7,653	0	-3,335
Ill.	1,500,510	64,845	'69 - 23.49	'65 - 25.96	1,683,376	1,500,510	'70 - 1,523,209	182,866	0	22,699
Ind.	683,832	26,000	'66 - 27.50	'65 - 28.29	735,540	712,633	'66 - 715,000	51,708	28,801	31,168
Iowa	470,318	17,039	'69 - 26.10	'65 - 30.10	512,874	470,318	'70 - 444,718	42,556	0	-25,600
Kans.	303,540	13,066	'66 - 28.30	'66 - 28.30	369,768	367,733	'66 - 369,768	66,228	64,193	66,228
Mich.	1,228,916	41,744	'69 - 30.13	'69 - 30.13	1,257,747	1,228,916	'70 - 1,257,747	28,831	0	28,834
Minn.	493,100	21,500	'69 - 23.53	'65 - 25.55	549,325	493,100	'70 - 505,895	56,225	0	12,798
Mo.	769,000	29,941	'69 - 26.03	'65 - 28.25	845,833	769,000	'70 - 779,364	76,833	0	10,364
Nebr.	191,000	8,961	'65 - 22.08	'65 - 22.08	197,859	193,200	'65 - 197,859	6,859	2,200	6,859
N.D.	100,441	4,480	'65 - 24.60	'65 - 24.60	110,208	105,295	'65 - 110,208	9,767	4,854	9,767
Ohio	1,730,900	56,559	'69 - 30.69	'65 - 32.94	1,863,053	1,730,900	'70 - 1,735,796	132,153	0	4,896
S.D.	115,000	5,950	'65 - 19.52	'66 - 20.22	120,309	124,941	'65 - 116,144	5,309	9,941	1,144
Wisc.	584,360	23,958	'69 - 22.93	'65 - 26.46	686,849	584,360	'70 - 595,217	102,489	0	10,857
Ala.	424,511	16,145	'66 - 28.95	'65 - 29.85	481,928	463,160	'66 - 467,398	57,417	38,649	42,887
Ark.[1]	252,046	10,370	'69 - 24.75	'66 - 25.51	264,539	252,046	'69 - 256,658	12,493	0	4,612
Fla.	781,703	32,418	'69 - 24.40	'65 - 26.58	861,670	781,703	'70 - 790,999	79,967	0	9,296
Ga.	722,000	28,489	'69 - 25.63	'65 - 27.87	793,988	722,000	'70 - 730,173	71,988	0	8,173
Ky.	452,000	18,100	'69 - 25.13	'66 - 26.42	478,202	452,000	'70 - 454,853	26,202	0	2,853
La.	508,881	21,500	'68 - 24.47	'65 - 27.24	585,660	527,788	'68 - 526,105	76,779	18,907	17,224
Miss.	312,093	12,270	'66 - 30.85	'66 - 30.85	378,529	350,190	'66 - 378,529	66,436	38,097	66,436
N.C.	835,739	33,322	'65 - 27.73	'65 - 27.73	924,019	850,979	'65 - 924,019	88,280	15,242	88,280

Table A-IV

Excess Capacity in Elementary Public Schools, State by State, 1970 (continued)

State	Public School Enrollment 1970 (E)	Total Classroom Teachers 1970 (T 1970)	For Peak Year Enrollment or for 1969 $(P/T)_P$	Highest P/T since 1965 (P/T)	High Capacity $(P/T)_H XT$	Crude Capacity High Enrollment (E_H)	Low Capacity $(P/T)_P XT_{1970}$	High Excess Capacity $[(P/T)_H XT_{1970}] - E_P$	Crude Excess Capacity $E_H - E_P$	Low Excess Capacity $[P/T)_P XT_{1970}] - E_P$
S. C.	382,800	15,300	'66 - 27.93	'65 - 27.73	424,269	387,694	'66- 427,329	41,469	4,894	44,529
Tenn	571,224	21,200	'66 - 29.09	'66 - 29.09	616,708	568,300	'66- 616,708	45,484	2,924	45,484
Va.[1]	682,644	25,866	'69 - 26.39	'65 - 27.36	707,694	682,644	'70- 682,604	25,050	0	-40
W. Va.	221,779	8,760	'65 - 29.14	'65 - 29.14	255,266	239,683	'65- 255,266	33,487	17,904	33,487
Alaska	59,783	2,349	'69 - 24.47	'66 - 25.97	61,004	59,783	'70- 57,480	1,221	0	-2,303
Ariz.	305,000	13,545	'69 - 22.30	'66 - 24.31	329,279	305,000	'70- 302,053	24,279	0	-2,947
Calif.	2,938,000	112,000	'69 - 26.59	'65 - 29.50	3,304,000	29,380,000	'70-2,978,080	366,000	0	40,800
Colo.	307,292	11,865	'69 - 26.10	'69 - 26.10	309,676	307,292	'70- 309,676	2,384	0	2,384
Hawaii	105,000	4,565	'69 - 23.60	'65 - 25.76	117,594	105,000	'70- 107,734	12,594	0	2,734
Idaho	92,841	3,695	'66 - 25.40	'65 - 25.74	95,109	92,725	'66- 93,853	2,268	116	1,012
Mont.	107,336	5,400	'65 - 22.08	'65 - 22.08	119,232	109,292	'65- 119,232	11,896	1,956	11,896
Nev.	73,768	2,782	'69 - 25.97	'70 - 26.52	73,768	73,768	'70- 72,249	0	0	-1,519
N. M.	154,519	6,090	'69 - 25.02	'65 - 25.85	157,426	154,519	'70- 152,372	2,907	0	-2,147
Okla.	350,000	14,810	'69 - 23.63	'65 - 27.37	405,350	350,000	'70- 350,000	55,350	0	0
Oregon	280,000	12,000	'68 - 23.38	'65 - 24.30	291,600	282,215	'68- 280,560	11,600	2,215	560
Texas	1,972,800	64,600	'69 - 31.08	'65 - 32.11	2,074,306	1,972,800	'70-2,007,768	101,506	0	34,968
Utah	165,486	5,850	'67 - 24.64	'65 - 29.37	171,814	170,434	'67- 144,144	6,328	4,948	-21,342
Wash.	442,618	17,480	'69 - 25.21	'66 - 26.79	468,289	451,125	'69- 440,671	8,507	8,507	-1,947
Wyo.	46,602	2,341	'65 - 22.01	'67 - 22.30	52,204	49,908	'65- 51,525	5,602	3,306	4,293
D. of C.	91,079	4,357	'67 - 24.93	'65 - 28.25	123,085	95,353	'67- 108,620	32,006	4,274	17,541

[1] NCES data were substituted for NEA data due to inconsistencies.

Source: Estimates of School Statistics, 1965-66 through 1970-71, Research Division - National Education Association, Tables 2 and 5; Fall Statistic of Public Schools, 1965 through 1970, Office of Education - U. S. Department of Health, Education and Welfare.

secondary level amounted to 1,652,413 under the "high capacity" estimate, 40,113 under the "low capacity" estimate and 24,980 under the "crude capacity estimate.

Tables A-V and A-VI show the extent of excess capacity that existed in the three regions State-by-State. The total "high excess capacity" equalled 683,869 in school districts outside SMSA areas, 607,058 in central city school districts, and 888,927 in other SMSA school districts. The "low excess capacity" estimates were: 86,447 outside SMSA, -26,624 central cities SMSA, and 287,952 other SMSA. The substantially reduced excess capacity in the "low" estimate compared to the "high" estimate was a function of the large number of school districts that experienced an increase in their pupil/teacher ratios during the 1969-70 school year. This was particularly true in central cities and outside of SMSA's. The central city region of twenty states and the outside SMSA region of twenty-two states experienced this increase, while only eighteen states experienced an increased pupil/teacher ratio in their other SMSA region. In addition, the increase in the pupil/teacher ratios were generally larger in the central cities than were comparable increases in the remaining two regions.

Cautious interpretation of the regional data was necessary. Both capacity estimates were understated due to the data limitations.

Table A-V

Estimated High Excess Capacity Outside SMSA, in Central City SMSA, and in Other SMSA, By State, 1969, K-12.

	OUTSIDE SMSA					CENTRAL CITY SMSA					OTHER SMSA				
	Classroom Teachers Outside (T_o)	High P/T Ratio (P/TH)	High Capacity P/TH X T_o	1969 Public School Enrollment	High Excess Capacity	Classroom Teachers Central City (T_o)	High P/T Ratio P/TH	High Capacity P/TH X T_c	1969 Public School Enrollment	High Excess Capacity	Classroom Teachers Other (Tocc)	High P/T P/TH X Tocc	High Capacity P/TH X Tocc	1969 Public School Enrollment	High Excess Capacity
Conn.	5,755	'67 22.7	130,638	116,828	13,810	10,284	'67 22.5	231,390	203,623	27,767	14,972	'67 21.3	318,904	314,418	4,486
Del.	1,421	'68 27.0*	38,372	38,372	0	741	'68 25.0	15,787	18,525	0	3,317	'69 24.3	80,603	76,299	4,304
Maine	9,467	'67 26.9	254,662	188,400	66,262	1,260	'69 22.2	27,983	27,983	0	1,293	'67 24.4	31,549	21,977	9,572
Md.	---	---	---	139,232	---	---	---	---	194,605	---	---	---	---	556,395	---
Mass.	8,755	'67 25.0	218,875	183,863	35,012	14,109	'68 25.3	356,958	307,583	49,375	29,907	'68 25.4	759,638	651,984	107,654
N.H.	5,691	'68 25.2	143,413	111,554	31,859	1,191	'68 24.0	28,584	28,109	475	594	'67 24.7	14,672	12,525	2,147
N.J.	16,401	'68 22.8	373,943	360,831	13,112	7,491	'67 24.6	184,279	184,270	9	42,292	'68 22.6	955,799	909,277	46,522
N.Y.	22,250	'69 22.9	509,536	509,536	0	65,192	'69 23.3	1,518,967	1,518,967	0	60,714	'69 23.3	1,414,650	1,414,650	0
Pa.	21,064	'67 24.7	520,281	492,895	27,386	25,066	'67 26.9	674,275	604,095	70,180	58,365	'67 24.2	1,412,433	1,249,012	163,421
R.I.	154	---	---	3,225	---	2,750	'67 23.6	64,900	57,741	7,159	5,544	'67 25.0	138,600	119,193	19,407
Vt.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ill.	20,069	'67 24.1	483,663	465,601	18,062	28,704	'67 27.3	783,619	766,393	17,226	47,918	'67 24.2	1,159,616	1,092,522	67,094
Ind.	19,713	'68 28.7	565,763	467,203	98,560	16,204	'67 26.3	426,165	401,858	24,307	14,833	'67 25.1	372,308	354,502	17,806
Iowa	20,062	'69 21.1	423,318	423,318	0	6,294	'69 25.4	141,612	141,612	0	4,217	'67 24.2	102,051	94,892	7,159
Kan.	12,758	'67 22.9	292,158	285,790	6,368	5,439	'67 26.0	141,414	129,443	11,971	4,383	'67 23.5	103,001	102,127	874
Mich.	17,105	'69 25.5	436,185	436,185	0	17,938	'67 29.6	530,964	520,217	10,747	45,465	'69 26.6	1,209,364	1,209,364	0
Minn.	18,872	'69 22.0	415,189	415,189	0	7,261	'67 25.0	181,524	172,089	9,435	13,782	'67 25.8	355,576	326,631	28,945
Mo.	16,123	'67 22.4	361,155	354,717	6,438	11,132	'68 29.0	322,828	281,629	41,199	16,438	'68 24.2	397,800	394,507	3,293
Neb.	9,522	'68 21.0	199,962	189,490	10,472	3,862	'67 28.0	108,136	104,669	3,467	1,377	'67 29.0	39,933	36,621	3,312
N.D.	5,436	'69 24.3	132,102	132,102	0	452	'67 23.0	10,396	10,227	169	241	'68 23.0*	5,543	5,453	90
Ohio	21,767	'68 26.8	583,356	559,420	23,936	25,945	'68 27.8	721,271	648,617	72,654	49,828	'68 25.8	1,285,562	1,215,794	69,768
S.D.	6,244	'69 22.9	142,992	142,992	0	789	'67 23.0	18,147	17,207	940	285	'68 25.1	7,154	6,536	618
Wisc.	17,881	'69 23.7	423,780	423,780	0	10,327	'67 26.5	273,666	263,343	10,323	12,360	'69 23.7	292,941	292,941	0
Ala.	15,916	'67 26.1	415,408	394,714	20,694	7,444	'67 29.1	216,620	203,215	13,405	8,907	'67 30.0	267,210	227,142	40,068
Ark.	10,303	'67 29.9	308,060	279,224	28,836	2,208	'67 26.0	57,408	53,441	3,967	2,972	'67 31.0	92,132	73,420	18,712
Fla.	20,505	'67 23.9	490,069	463,404	26,665	15,385	'67 25.9	298,472	373,849	24,623	23,395	'68 25.0	584,875	570,842	14,033

Table A-V

Estimated High Excess Capacity Outside SMSA, in Central City SMSA, and in Other SMSA, By State, 1969, K-12. (Continued)

	OUTSIDE SMSA						CENTRAL CITY SMSA				OTHER SMSA				
	Classroom Teachers Outside (T_O)	High P/T Ratio (P/TH)	High Capacity P/TH X T_O	1969 Public School Enrollment	High Excess Capacity	Classroom Teachers Central City (T_o)	High P/T Ratio P/TH	High Capacity P/TH X T_C	1969 Public School Enrollment	High Excess Capacity	Classroom Teachers Other (Tocc)	High P/T P/TH X Tocc	High Capacity P/TH X Tocc	1969 Public School Enrollment	High Excess Capacity
Ga.	21,644	'67 27.6	597,374	573,562	23,812	9,251	'67 28.4	262,728	231,271	31,457	12,015	'67 26.8	322,002	307,583	14,419
Ky.	17,809	'67 25.9	461,253	422,086	39,167	4,354	'67 32.4	141,070	104,923	36,147	7,619	'67 29.6	225,522	176,772	48,750
La.	17,017	'67 24.7	420,320	399,904	20,416	10,181	'67 25.0	254,525	242,299	12,226	8,600	'69 24.6	211,563	211,563	0
Miss.	19,122	'67 28.1	537,328	478,061	59,267	2,574	'67 27.0	69,498	54,825	14,673	1,682	'67 28.0	47,096	42,398	4,698
N.C.	4,687	'69 26.2	122,810	122,810	0	1,335	'69 24.6	32,844	32,844	0	1,325	'69 26.8	35,520	35,520	0
S.C.	15,664	'67 26.4	413,530	405,697	7,833	1,704	'69 26.9	45,826	45,826	0	7,593	'67 27.2	206,530	196,658	9,872
Tenn.	16,944	'67 28.0	474,432	452,393	22,039	12,111	'67 26.9	325,786	307,627	18,159	4,918	'69 26.7	131,305	131,305	0
Va.	17,792	'67 24.0	427,008	419,899	7,109	10,445	'67 23.8	248,591	238,158	10,433	17,733	'67 23.9	423,819	418,499	5,320
W. Va.	11,473	'67 26.7	306,329	282,241	24,088	1,874	'68 26.0	48,724	41,782	6,942	3,144	'67 24.6	77,342	77,343	0
Alaska	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ariz.	5,522	'67 24.2	133,632	116,516	17,116	7,945	'68 24.9	197,830	190,681	7,149	4,801	'68 23.9	114,744	110,914	3,830
Cal.	14,440	'67 25.6	369,664	365,344	4,320	57,884	'67 26.8	1,551,291	1,510,772	40,519	109,602	'67 26.9	2,948,294	2,783,884	164,410
Colo.	6,445	'67 22.3	143,723	142,433	1,290	6,899	'67 24.8	171,095	160,056	11,039	8,998	'69 24.9	224,046	224,046	0
Hawaii	---	---	---	34,048	---	2,622	'67 26.0	68,172	63,724	4,448	---	---	---	80,658	---
Idaho	6,599	'67 25.9	170,914	153,108	17,806	620	'69 26.7	16,548	16,548	0	448	'69 22.8*	10,217	10,217	0
Mont.	5,421	'67 26.2	136,609	132,908	3,800	1,138	'68 26.4	29,255	30,043	0	---	'67 28.0	---	12,800	---
Nev.	---	---	---	25,605	---	1,790	'69 26.3	47,078	47,078	0	2,308	'69 22.1*	51,011	51,011	0
N.M.	8,328	'68 24.6	204,869	196,535	8,334	2,340	'68 28.0	65,520	62,482	3,038	956	'69 21.6*	20,641	20,641	0
Okla.	12,024	'69 24.9	299,390	299,390	0	6,597	'68 28.7	189,334	186,039	3,295	4,790	'67 26.9	128,851	126,945	1,906
Ore.	8,741	'69 22.0	192,311	192,311	0	4,260	'68 24.0	102,240	98,835	3,405	8,791	'67 22.6	198,677	187,240	11,437
Texas	28,187	'69 24.2	682,124	682,124	0	44,903	'69 28.2	1,266,269	1,266,269	0	29,496	'67 27.2	802,291	713,807	88,484
Utah	2,640	'69 26.7	70,495	70,495	0	2,378	'69 28.3	67,285	67,285	0	6,180	'67 26.8	165,624	165,003	621
Wash.	10,846	'69 27.2	286,348	286,348	0	6,769	'67 27.1	183,440	178,701	4,739	13,460	'67 27.1	364,766	355,351	9,415
Wyo.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Wash. D.C.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

* Indicates only figure available (not a comparison of two P/T ratios)

Table A-VI

Estimated Low Excess Capacity Outside SMSA, Central City SMSA, and in Other SMSA, K-12, by State, 1969.

	Outside SMSA					Central City					Other SMSA				
State	Classroom Teachers Outside (T_o)	Peak of 1969 P/T Ratio $(P/T)_p$	Low Capacity $P/T_p \times T_o$	1969 Public School Enrollment	Low Excess Capacity	Classroom Teachers Central City	$(P/T)_p$	Low Capacity $(P/T)_p \times T_o$	1969 Public School Enrollment	Low Excess Capacity	Classroom Teachers Other SMSA (T_{occ})	$(P/T)_p$	Low Capacity $(P/T)_p \times T_{occ}$	1969 Public School Enrollment	Low Excess Capacity
Conn.	5,755	21.1	121,431	116,828	4,603	10,284	21.7	222,946	203,623	19,323	14,972	20.5	306,926	314,418	7,492
Del.	1,421	---	---	38,372	---	741	25.0	18,525	18,525	0	3,317	23.8	78,945	76,299	2,646
Maine	9,467	23.2	219,634	188,400	31,234	1,260	21.0	26,460	27,983	1,523	1,293	---	---	21,977	---
Md.	---	---	---	139,232	---	---	---	---	194,605	---	---	---	---	556,395	---
Mass.	8,755	24.4	213,622	183,863	29,759	14,109	25.3	356,958	307,583	49,375	29,907	25.4	759,638	651,984	107,654
N.H.	5,691	25.2	143,413	111,554	31,859	1,191	24.0	28,584	28,109	475	594			12,525	---
N.J.	16,401	22.8	373,943	360,831	13,112	7,491	24.0	179,784	184,270	4,486	42,292	22.6	955,799	909,277	46,522
N.Y.	22,250	22.7	505,075	509,536	4,461	65,192	21.3	1,388,590	1,518,967	130,377	60,714	22.7	1,378,208	1,414,650	36,442
Pa.	21,064	23.9	503,430	492,895	10,535	25,066	23.8	596,571	604,095	7,524	58,365	22.4	1,307,376	1,249,012	58,364
R.I.	154	---	---	3,225	---	2,750	19.0	52,250	57,741	5,491	5,544	22.1	122,522	119,193	3,329
Vermont	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ill.	20,069	21.7	435,497	465,601	30,104	28,704	26.5	760,656	766,393	5,737	47,918	22.9	1,097,322	1,092,522	4,800
Ind.	19,713	28.7	565,763	467,203	98,560	16,204	24.6	398,618	401,858	3,240	14,833	24.3	360,442	354,502	5,940
Iowa	20,062	19.8	397,228	423,318	26,090	5,575	23.8	132,685	141,612	8,927	4,712	23.8	112,146	94,892	17,254
Kansas	12,758	21.1	269,194	285,790	16,596	5,439	23.7	128,904	129,443	539	4,383	22.0	96,426	102,127	5,701
Mich.	17,105	24.3	415,652	436,815	21,163	17,938	27.3	489,707	520,217	30,510	45,465	23.7	1,077,520	1,209,364	131,844
Minn.	18,872	23.3	439,718	415,189	24,529	7,261	23.8	172,812	172,089	723	13,782	24.0	330,768	326,631	4,137
Mo.	16,123	21.3	343,420	354,717	11,297	11,132	29.0	322,828	281,629	41,199	16,438	24.2	397,800	394,507	3,293
Neb.	9,522	21.0	199,962	189,490	10,472	3,862	27.0	104,274	104,669	395	1,377	24.0	33,048	36,621	3,573
N.D.	5,436	23.5	127,746	1[illegible],102	4,356	452	23.0	10,396	10,227	169	241	23.0	5,543	5,453	90
Ohio	21,767	26.8	583,356	559,420	23,936	25,945	27.8	721,271	648,617	72,654	49,828	25.8	1,285,562	1,215,794	69,768
S.D.	6,244	21.7	135,495	142,992	7,497	789	23.0	18,147	17,207	940	285	18.0	5,130	6,536	1,406
Wisc.	17,881	23.4	418,415	423,780	5,365	10,327	26.3	271,600	263,343	8,257	12,360	22.5	278,100	292,941	14,841
Ala.	15,916	24.9	396,308	394,714	1,594	7,444	29.0	215,876	203,215	12,661	8,907	28.3	252,068	227,142	24,926
Ark.	10,303	25.5	262,727	279,224	16,497	2,208	25.0	55,200	53,441	1,759	2,972	23.0	68,356	73,420	5,064
Fla.	20,505	23.1	473,666	463,404	10,262	15,385	24.3	373,849	373,849	0	23,395	25.0	584,875	570,842	14,033
Ga.	21,644	25.5	551,922	573,562	21,640	9,251	24.8	229,425	231,271	1,846	12,015	25.4	305,181	307,583	2,402
Ky.	17,809	23.6	420,292	422,086	1,794	4,354	25.0	108,850	104,923	3,927	7,619	24.7	188,189	176,772	11,417
La.	17,017	22.6	384,584	399,904	15,320	10,181	24.7	251,471	242,299	9,172	8,600	24.6	211,563	211,563	0
Miss.	19,122	28.1	537,328	478,061	59,267	2,574	27.0	69,498	54,825	14,673	1,682	28.0	47,096	42,398	4,698

Table A-VI

Estimated Low Excess Capacity Outside SMSA, Central City SMSA, and in Other SMSA, K-12, by State, 1969 (con't.)

	Outside SMSA					Central City					Other SMSA				
State	Classroom Teachers Outside (T_o)	Peak of 1969 P/T Ratio $(P/T)_p$	Low Capacity $P/T_p \times T_o$	1969 Public School Enrollment	Low Excess Capacity	Classroom Teachers Central City	$(P/T)_p$	Low Capacity $(P/T)_p \times T_o$	1969 Public School Enrollment	Low Excess Capacity	Classroom Teachers Other SMSA (T_{occ})	$(P/T)_p$	Low Capacity $(P/T)_p \times T_{occ}$	1969 Public School Enrollment	Low Excess Capacity
N.C.	4,687	24.7	115,769	112,810	7,041	1,335	23.7	31,640	32,844	1,204	1,325	25.5	33,788	35,520	1,732
S.C.	15,664	25.8	404,131	405,697	1,566	1,704	26.7	45,497	45,826	329	7,593	26.0	197,418	196,658	760
Tenn.	16,944	27.6	467,654	452,393	15,261	12,111	26.4	319,730	307,627	12,103	4,918	25.1	123,442	131,305	9,595
Virginia	17,792	23.5	418,112	419,899	1,787	10,445	23.0	240,235	238,158	2,077	17,733	23.8	422,045	418,499	3,546
W. Va.	11,473	26.7	306,329	282,241	24,088	1,874	25.2	47,225	41,782	5,443	3,144	23.0	72,312	77,342	5,030
Alaska	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ariz.	5,522	22.6	124,797	116,516	8,281	7,945	24.9	197,830	190,681	7,149	4,801	23.9	114,744	110,914	3,830
Calif.	14,440	25.5	368,220	365,344	2,876	57,884	26.3	1,522,349	1,551,291	28,942	109,602	25.9	2,838,692	2,783,884	54,808
Colo.	6,445	20.1	129,545	142,433	12,888	6,899	23.6	162,816	160,056	2,760	8,998	24.0	215,952	224,046	8,094
	---	---	---	34,048	---	2,622	24.0	62,928	63,724	796	---	---	---	80,658	---
Idaho	6,599	24.0	158,376	153,108	5,268	620	25.0	15,500	16,548	1,048	448	---	---	10,217	---
Mont.	5,421	23.7	128,478	132,809	4,331	1,138	26.4	30,043	30,043	0	---	19.9	---	12,800	---
Nev.	---	---	---	25,605	---	1,790	25.0	44,750	47,078	1,870	2,308	---	---	51,011	---
N.M.	8,328	24.6	204,869	196,535	8,334	2,340	28.0	65,520	62,482	3,038	956	---	---	20,641	---
Okla.	12,024	23.5	282,564	299,390	16,826	6,597	28.7	189,334	186,039	3,295	4,790	26.4	126,456	126,945	489
Ore.	8,741	20.0	174,820	192,311	17,491	4,260	24.0	102,240	98,835	3,405	8,791	20.0	175,820	187,240	11,420
Texas	28,187	21.4	603,202	682,124	78,922	44,903	25.8	1,158,497	1,266,269	107,772	29,496	25.4	749,198	713,807	35,391
Utah	2,640	---	---	70,495	---	2,378	26.0	61,828	67,285	5,457	6,180	26.8	165,624	165,[illegible]03	621
Wash.	10,846	26.0	281,996	286,348	4,352	6,769	25.0	169,225	183,440	14,215	13,460	25.5	343,230	355,351	12,121
Wyo.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Wash. D.C.	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

The "high excess capacity" estimates was understated since the pupil/teacher ratio for only three years were available. Given the general downward trend in pupil/teacher ratios, excess capacity would have been larger if the record for the past six years were available. A different problem was encountered with the estimation of "low excess capacity." The analysis assumed that there were no shifts in population within each state during three years under investigation, since the percentage of school-age population by the three regions was available only for the spring of 1970. In reality, it is quite likely that enrollments have decreased in central cities and to a less extent in areas outside of SMSA regions. If this were the case, the "low capacity" estimate would have employed the pupil/teacher ratio associated with the peak enrollment year rather than the 1969 pupil/teacher ratio. There was no apparent adjustment that could have been made to compensate for this deficiency.[5]

The Determination of Net Influx

The marginal costs of absorbing nonpublic students into the public school system was obviously correlated with the number of nonpublic students. The concentrations of these students in certain states and in certain regions within states, would generate substantial costs for the affected areas. Thus much effort was extended in attempts to identify the location and magnitude of the nonpublic school enrollments.

Unfortunately, published data on nonpublic school enrollments, particularly nonpublic non-Catholic enrollments, were generally found to be deficient. The intensity of this problem was heightened when it was discovered that the data in the U.S. Office of Education collected by Howard Kossoy on nonpublic non-Catholic schools would not be made available in time to be incorporated into the analysis.

The Catholic enrollment estimates used in the State-by-State analysis were obtained from the National Catholic Education Association's Data Bank. These data were assumed to be the "best" estimate of Catholic school enrollment state-by-state. One adjustment was made for Washington, D. C.. For all significant concentrations of Catholic students, except in Washington, D. C., the Diocesan lines do not cross state boundaries. However, in this case the Diocese of Washington, D. C. flows into Maryland and Delaware. Thus to compensate for this, 61.8 percent of the Washington, D. C. enrollment was added to Maryland, 6.2 percent was added to Delaware, and the remaining 32.0 percent was allocated to Washington, D. C.

The nonpublic non-Catholic enrollment estimates used in the State-by-State were based upon a 1968 study conducted by the U. S. Office of Education. These data were cross-checked against data on individual nonpublic non-Catholic collected by the University of Notre Dame. This cross-checking revealed no sharp unexplainable differences.[6] The 1968 estimates were then inflated by 2 percent, in an attempt to reflect the moderate increase in enrollments recently experienced by nonpublic non-Catholic schools.

Total nonpublic enrollments in the State-by-State analysis equalled the sum of Catholic and nonpublic non-Catholic enrollments. "Net influx" was determined by subtracting excess capacity from the total nonpublic enrollment.[7] Thus in New Jersey under the "low excess capacity" formula, "net influx" was estimated to be 52,286 secondary students. This represented a total nonpublic enrollment of 69,613 students less an excess capacity of 17,327 students. Approximately 25 percent of New Jersey's nonpublic secondary students would be absorbed under the "low excess capacity" formula with no additional costs to the public sector. The remaining 52,286 students--the "net influx"--would enter the public school system with their associated costs.

In those cases where excess capacity was estimated to be negative, these students were added to the total nonpublic school enrollments. Massachusetts, for example, had 60,950 nonpublic students and a "low excess capacity" of -4,891 students. Therefore the "net influx" into the secondary schools of Massachusetts would be 65,841 students. Thus the formula for "net influx" not only attempted to reflect the costs of absorbing nonpublic students, but also the costs of the over-utilization of the existing public school facilities.

Due to the inability to isolate the nonpublic non-Catholic enrollments by regions within each state, the State-Regional analysis examined only the impact of absorbing Catholic students. With this exception, the calculation of "net influx" was essentially the same in the State-Regional analysis as it was in the State-by-State analysis.

One additional calculation had to be made in the State-Regional analysis. This was the division of Catholic students into the three regions: Central City SMSA, Other SMSA, and Outside SMSA. Data received from the National Catholic Educational Association was used in this calculation. Catholic children attending "inner city" or "other urban schools" were classified as central city, "suburban" were classified as other SMSA, and "small town and rural" were classified as outside SMSA.

The Determination of Costs

The costs of absorbing nonpublic students into the public school system were divided into four groups. "Teacher costs"--the costs of any new classroom personnel needed to handle the "net influx" of nonpublic students". Other School Services"--the costs incurred in providing non-instructional personnel such as nurses, psychologists, etc. "Other Current Expenses"--the costs associated with administration, operation of the plant, maintenance of the plant, and fixed charges. "Construction costs"--the total cost of building new school capacity needed for the estimated "net influx".

Instruction cost estimates reflected the number of new teachers that would be hired by the public sector under the three capacity formulas. The number of teachers needed was determined by dividing the appropriate pupil/teacher ratio into the "net influx" of students. The pupil/teacher ratio varied with the capacity formula employed. The estimation of instruction costs under the "high excess capacity" formulation employed the historically high pupil/teacher ratio (P/TH), the "low excess capacity" estimate employed the previous year or the peak pupil/teacher ratio (P/TP), and the "crude excess capacity formula employed the base year pupil/teacher ratio-generally 1970.

The estimated number of teachers needed was then multiplied times the average elementary and secondary teacher salary in each state for the State-by-State and the State-Regional analysis. This product then became the total teacher costs. The size of these costs varied proportionally with "net influx", the pupil/teacher ratio and the average teacher salary. Thus, the high instruction costs associated with the low excess capacity formula in Table III for the State of New York, were a function of the large number of elementary nonpublic students that must be absorbed, 434,286, the pupil teacher ratio of 23.32, and the high average teacher salary of $10,700. Whereas, the instruction costs in the State of Arkansas were minor in comparison, since only 3,071 students needed to be absorbed, the pupil/teacher was higher--24.77, and the average teacher salary was $4,150 lower.

As was the case with instructional personnel, other school services were assumed to vary directly with the number of students in the school district. Thus if enrollment increased by 10 percent it would be assumed that the number of cases requiring a nurse, a psychologist, or a speech therapist would increase by 10 percent. Therefore these costs were directly allocated to the "net influx" of students. The current state average per pupil costs associated with other school services was multiplied times the "net influx" in order to generate total other school services for the State-by-State and the State-Regional analysis. Thus variation between states on expenditures for other school services directly affect the cost of absorbing non-public students.

The latest expenditure data for public elementary and secondary schools by purpose and by state was published in the Digest of Education Statistics 1970. Unfortunately the most recent year published is 1967-68. These data were therefore inflated at a 6 percent compounded rate which represented a "best guess" of how expenditures have actually increased.

Unlike other school services, other current expenditures were assumed to be partly variable and partly fixed. Therefore as enrollments increase it was assumed that, other current expenditures would increase, but that this increase would be less than the current per pupil expenditures. For example, consider the costs associated with maintenance. If a new wing was added to an existing school, maintenance costs would probably increase in proportion to the old maintenance costs. However, if an additional 100 students were added to the old wing, it would be unlikely that this would substantially change maintenance costs.

Given that there were potential cost savings in the area of other current expenditures, the per pupil costs were weighted. The weight attempted to reflect the amount of "squeezing" that would be undertaken. Three weights were used. The "high excess capacity" weight equalled the pupil/teacher ratio of the base year divided by the historically high pupil/teacher ratio (P/T_H). The weight used in the "low excess capacity" calculation was the pupil/teacher ratio of the base year divided by the pupil/teacher ratio of the preceding or peak enrollment year (P/T_P). The "crude excess capacity" weight equalled one, since there was no attempt in this analysis to adjust for changes in pupil/teacher ratios.

In most cases the weight reduced the per pupil other operating costs. However, in those instances where an over-utilization of public school facilities were found the weight increased these per pupil costs. Thus, if the pupil/teacher ratio in the base year was 25.0 and in the P/TP year was 20.0, other current operating expenses were increased by 25 percent. This calculation was consistent with the assumption that the previous year or the peak enrollment year was the appropriate norm to judge capacity.

As was the case with the per pupil costs of other school services, the most recent published data were found in the Digest of Education Statistics, 1970. These data represented costs for 1967-68 and had to be inflated to represent the 1970-71 costs. A 5 percent compounded rate was employed. The lower rate of compounding was accepted as a reflection of less labor intensity for other current expenditures compared to other school services.

Construction cost estimates were based upon the survey of construction costs undertaken by School Management. Wide variations in construction costs were found. These variations did not appear to be related to state income, population densities, state and local tax effort or other typical causes that might help to explain the wide swings in expenditures per pupil.

FOOTNOTES

1. Estimates of School Statistics 1970-71, Research Report 1970-R15, Research Division - National Education Association.

Data collected by the National Education Association generally appeared to be superior to the data collected by the National Center for Educational Statistics. This judgment was based upon the wide yearly fluctuations in pupil/teacher ratios within individual states. For example, in Iowa the elementary enrollments and teachers were estimated by NCES to be:

	1970	1969	1968	1967	1966	1965
Enrollments	373,701	374,200	464,900	359,479	452,555	445,460
Teachers	16,552	17,800	16,600	17,303	16,474	16,254

These random variations in pupils and teachers cast severe doubt upon the resultant pupil/teacher ratios. The probably cause for these variations is the lack of control for differences in the definition of "elementary school."

The National Education Association's data were more consistent than the NCES data, although by no means totally consistent. The NEA elementary data indicated:

	1970	1969	1968	1967	1966	1965
Enrollments	470,318	468,183	467,589	463,941	446,476	445,468
Teachers	17,039	17,936	16,382	20,500	16,821	14,800

Even with the NEA data, random variations occur. This is the case of the estimated elementary teachers for Iowa in 1967. However, the frequency of these occurrences are far less with the NEA data than they are with the NCES data.

In sum, if the NCES data were used, approximately twenty states would have been discarded due to the inconsistent data. The use of the

NEA data resulted in loss of only one state at the elementary level and four states at the secondary level. In all five cases it was possible to substitute the NCES data for the inconsistent NEA data.

2. The "crude capacity" estimates were not calculated for the regional analysis state-by-state. This was due to the fact that there was only one estimation--1970--of enrollments region-by-region.

3. Wherever possible the analysis was based on 1970 data. This is true of the State-by-State analysis with the exception of Connecticut, Mississippi and Virginia at the secondary level, and also true of the City-by-City analysis, with the exception of St. Louis. The unavailability of pupil/teacher ratios by Standard Metropolitan Statistical Areas for 1970 made it necessary to calculate these estimates for 1969.

4. The "low excess capacity" estimates were calculated with the same base years as the "high excess capacity" and the "crude excess capacity" estimates. See footnote 3.

5. Note that three states, Mississippi, West Virginia, and North Dakota, experienced a decline in total enrollment before 1968. Thus in the calculation of low excess capacity the 1967 pupil/teacher ratio for the three regions were used.

6. For example, data supplied by the Board of Parish Education, the Lutheran Church-Missouri Synod, indicated that elementary enrollments in 1968 equalled 190,744 students. The U. S. Office of Education estimated 177,735 students were enrolled in Lutheran elementary schools. This 7 percent variation in the estimates could be due to differences in defining "elementary". The same was true of the Protestant Episcopal Church schools. Enrollment data compiled from Directory of Episcopal Church Schools indicated that 30,642 students were enrolled in schools with grades N-8. If this elementary students enrolled in N-12 schools were added to the 30,642 students, the sum would closely approximate the U. S. Office of Education's estimate of 34,391 students.

   See: Report entitled, "Enrollments in Nonpublic Schools" for a more detailed analysis of nonpublic-non-Catholic enrollments.

7. The calculations of "net influx" for the State-by-State analysis and the State-Regional analysis are found at the end of this Appendix. The "net influx" calculations for the city-by-city analysis are found in Appendix D.

APPENDIX D

ESTIMATED MARGINAL COSTS OF ABSORBING CATHOLIC SCHOOL STUDENTS IN FIVE PUBLIC SCHOOL SYSTEMS: SELECTED CASE STUDIES

CONTENTS

Cost Calculations of the City-by-City Analysis 611
Sources of Data for the Sample Cities' Cost Analysis 616

Cost Calculations of the City-by-City Analysis

The city-by-city analysis represents the most detailed examination of marginal costs. Unlike the state-by-state and the state-regional analyses, this analysis was conducted with primary data collected directly from the school districts that were under investigation. Unfortunately, there was little uniformity in basic definitions of cost and elementary enrollments. Thus, although the use of primary data greatly increased the confidence that can be placed in the analysis, it necessitated numerous individual adjustments of the data.

In addition to the basic data incorporated into the formal analysis, special problems were found in several of the cities. These problems could not be included in the analysis but should be noted in policy decisions.

San Francisco, for example, is confronted with the affects of last year's earthquake. Extensive building and remodeling must be undertaken in the near future to accomodate the "Field Act"--safety standards for earthquake tremors. In detail, the application of the Field Act to the San Francisco Unified District schools would entail·

Extensive remodeling - 18 schools (368 classrooms)

Extensive remodeling - 55 portable classrooms

Complete replacement - 195 classrooms.

Thus, a total of 618 classrooms must be constructed or remodeled. The expenditures necessary to comply to the earthquake safety standards coupled with the additional expenditure of $6,695,393 (the low cost estimate) in current operating expenses to support the nonpublic students in San Francisco, would surely test the fiscal capacity of the city.

Miami's special problem is one of uncertainty. The Dade County (Miami) public school enrollment has been increasing at an average rate of 3.4 percent from 1965 to 1969. However, in 1970 public school enrollment dropped 1.22 percent. Nonpublic school enrollment also increased an average of 3.4 percent from 1965-69, but increased 26.1 percent in 1970. It is estimated that this swing of approximately 8,000 pupils in 1970 is due to the integration of public schools. Another factor affecting Miami area schools are the "new" Cuban refugee pupils who account for 10.9 percent of the total public school population. These Cuban refugee pupils are increasing at a sharply decreasing rate.

New Orleans is also faced with racial problems. The sheer number of black students in the public school system has made the total elimination of segregation quite difficult. This problem appears to be worsening as more whites leave New Orleans Parish. In order to maintain a racial balance, the school district is attempting to introduce a "teacher desegregation plan." Under this plan no school would have less than 25 percent of any one race on the faculty. Although the plan is quite laudable from an educational and social view, it will limit the flexibility of the system and may cause a shortage of teachers.

The unconstitutionality of aid to nonpublic schools in Providence will ultimately cause a more rapid influx of Catholic students into the public school system. However, the Church has urged all parishes to assume the financial burden for at least one more year.

Rhode Island Catholic schools qualified for roughly $95,000 in aid for the period September, 1970-January, 1971. They received this money from the state on January 30. Of the $95,000, approximately $30,000 went to Providence. For the period February-June, 1971 (second semester), Rhode Island and Providence qualified for roughly the same amount of state aid. This was to be paid June 30, 1971. However, the court decision was rendered before the due date; no funds were received. The parishes are now faced with making up the deficit created by the absence of these anticipated funds.

This problem as it develops will be compounded by the anticipated demise of another source of indirect aid to the Catholic schools. An experimental program has been operated with 11 teachers "on loan" (teacher loan is a variation of dual enrollment) from public schools to Catholic schools. This program was so successful it was to be enlarged this year and include 45 additional teachers. These 56 teachers would be employed by public schools and work in Catholic schools. Church attorneys have indicated that this program is most probably in violation of the recent court rulings and will be stopped--no definitive decision from public schools yet.

These teachers, 20 of whom were to be used in Providence, were by the large destined for extremely poor parishes. The combination fault of both programs would seem to rule out the chance of survival for these parishes.

Still, the Catholic school support in Providence-Rhode Island is strong enough so that the system will not close in its entirety but will gradually be reduced. Catholic school officials have a positive relation with public school people. They are empathetic toward the position of public schools in the face of massive closures. Accordingly, they plan to "hold their own" for at least another year. After that, they will begin the gradual closing of schools. Since bond issues have been largely unsuccessful in recent years, the Church is planning to urge support for obtaining additional funds to meet the impact of their closings. In the meantime, the Catholic school facilities will be available to the public schools on a rental basis.

There seems to be no imminent threat to the other (nonpublic, non-Catholic) private schools in Providence. There are approximately 6 schools in this category: 3 nonsectarian, a Jewish, an Episcopalian, and a Lutheran. These schools draw beyond Providence, especially the nonsectarian schools. Total enrollment of these 6 private schools is about 2,000.

If everything goes as planned by Catholic school officials, the public school impact will be slight in the short run, but cumulative over time.

SOURCES OF DATA FOR THE SAMPLE CITIES' COST ANALYSIS

SAN FRANCISCO:

Enrollment Data Summary for School Year 1970-71, Archdiocese of San Francisco.

Financial and Statistical Data San Francisco Unified School District 1969-70, San Francisco Unified School District.

National Education Association 1970, Data on Teacher Salaries.

Number of Pupils and Teachers, and Pupils Per Teacher 1965-66, 1967, 1968, 1969, 1970, San Francisco Unified School District.

NEW ORLEANS:

Facts and Finance 1970-71, Orleans Parish Public Schools.

National Education Association 1970, Costs on Teacher Salaries.

Registration by Grades 1965, 1966, 1967, 1968, 1969, 1970, Orleans Parish Public Schools.

State Equalization Fund Minimum Foundation Program 1965, 1966, 1967, 1968, 1969, 1970, Orleans Parish Public Schools.

MIAMI:

Dade County Non-Public Schools First Month Membership Report, School Year 1970-71, Dade County Public Schools.

Desegregation Reports 1965, 1966, 1967, 1968, 1969, 1970, Dade County Public Schools.

First Month Membership Reports, Dade County Public Schools.

Monthly Attendance Report--First Month, Dade County Public Schools.

Superintendent's 17th Annual Statistical Report School Year 1969-70, Dade County Public Schools.

PROVIDENCE:

Enrollment Report--First Quarter 1965, 1966, 1967, 1968, 1969, 1970, Providence Public Schools.

List prepared by R. Metzcus and F. Navratil on Providence Nonpublic School Pupils, 1970-71.

List prepared by Providence Public Schools on Public School Teachers 1965-1970, Cost Data on Teacher Salaries, Other School Services, and Other Current Expenditures.

ST. LOUIS:

Annual Report of the Department of Instruction. Board of Education of the City of St. Louis, 1967-68, 1968-69, 1969-70.
Annual Report of the Office of Business Services. Board of Education of the City of St. Louis, 1968-69, 1969-70.
Annual Report of the Superintendent of Instruction. Board of Education of the City of St. Louis, 1965-66, 1966-67.
Lists and other data collected and prepared by J. Wurm on enrollment in all St. Louis schools.

APPENDIX E

THE DETERMINANTS OF ENROLLMENT IN CATHOLIC SCHOOLS: AN EMPIRICAL ANALYSIS OF THE ARCHDIOCESE OF ST. LOUIS

CONTENTS

The Archdiocese of St. Louis Data 619

Quality Control and the Data Available for Analysis 626

THE ARCHDIOCESE OF ST. LOUIS DATA

Parishoner Survey - St. Louis, Missouri

Column #	Code
1-10	Parish I.D.
11-15	Individual I.D.
	STANDARD CODES TO BE USED THROUGHOUT - Not applicable + Not ascertainable, no answer
16	This questionnaire is to be answered by the HEAD OF THE HOUSEHOLD, that is, the MAIN WAGE EARNER in this home. Please answer the questions by CIRCLING the NUMBER which represents your response, or, by FILLING in the BLANK SPACE. 1. Which of the following is the MAIN WAGE EARNER in this home? 1 The husband 2 The wife 3 A widower 4 A widow 5 Single male 6 Single female 7 Another person - (SPECIFY RELATIONSHIP)
17	2. Is there a SECONDARY WAGE EARNER in this home? (A SECONDARY WAGE EARNER is another adult who makes the NEXT MOST significant contribution to the family income. The secondary wage earner may be the spouse, or a parent, or any other person living in this home.)

Column #	Code
	1 Yes (IF YES, ANSWER QS. 3,4B,5B,6B) 2 No (IF NO, DO NOT ANSWER QS. 3,4B,5B,6B)
18	3. Which of the following persons is the SECONDARY WAGE EARNER in this home? 1 The husband 2 The wife 3 A son 4 A daughter 5 A parent 6 Another person (SPECIFY RELATIONSHIP)
19	4. (A) Including all wages, pensions, social security, alimony, child support payments, rental income and any other sources of income, approximately how much was the gross income of the MAIN WAGE EARNER for the year 1968?
20	(B) Approximately, what was the total gross income, including all wages, pensions, social security, alimony, child support payments, rental income, and any other sources of income for the year 1968, of the SECONDARY WAGE EARNER? 1 Up to $3,000 2 $3,001-$4,200 3 $4,201-$5,400 4 $5,401-$6,600 5 $6,601-$7,800 6 $7,801-$9,000 7 $9,001-$10,200 8 $10,201-$13,000 9 $13,001-$16,000 0 $16,001-$20,000 = $20,001-$25,000 $ over $25,000
21	5. (A) How old were you (MAIN WAGE EARNER) as of your last birthday? (IF OVER 65 PUT 0 IN APPROPRIATE COLUMN)

Column #		Code
22		(B) How old was the SECONDARY WAGE EARNER as of that person's last birthday? (IF OVER 65 PUT 0 IN THE APPROPRIATE COLUMN)

(A) MAIN WAGE EARNER	(B) SECONDARY WAGE EARNER (Only if applicable)
1 Under 21	1 Under 21
2 21-25	2 21-25
3 26-30	3 26-30
4 31-35	4 31-35
5 36-40	5 36-40
6 41-45	6 41-45
7 46-50	7 46-50
8 51-60	8 51-60
9 61-65	9 61-65

Column #		Code
23	6.	(A) What was the highest school grade you (MAIN WAGE EARNER) completed?
24		(B) What was the highest grade completed by the SECONDARY WAGE EARNER?

(A) MAIN WAGE EARNER	(B) SECONDARY WAGE EARNER (only if applicable)
1 8th grade or less	1 8th grade or less
2 Some high school	2 Some high school
3 Graduated high school	3 Graduated high school
4 Some college	4 Some college
5 Graduated college (SPECIFY DEGREE)	5 Graduated college (SPECIFY DEGREE)
______________	______________
6 Some graduate school	6 Some graduate school
7 Graduate degree(s) (SPECIFY ALL DEGREE(S)	7 Graduate degree(s) (SPECIFY ALL DEGREE(S)
______________	______________
8 Nurses Training	8 Nurses Training
9 Other technical school (e.g. Hairdresser, Electrician)	9 Other technical school (e.g. Hairdresser, Electrician)

Column # Code

25 7. Do you own your own home, are you buying it, do you rent it, are you living with someone else without paying, or do you have some other arrangement?

1 Own (NO MORTGAGE)
2 Buying
3 Renting
4 Living with someone else and not paying
5 Other

26 8. (A) This question applies to those WITH PRE-SCHOOL CHILDREN. How many pre-school children are there in the home?

__________________(number)

27 (B) If you have any children of pre-school age, do you plan to send them to a Catholic elementary school?

1 Yes
2 No

9. This question applies to those with children of ELEMENTARY SCHOOL AGE. We would like to know the following facts about EACH CHILD.

(A) Is child (1) MALE or (2) FEMALE?
(B) What is child's school grade (1-8)
(C) Does child attend (1) CATHOLIC SCHOOL, or (2) PUBLIC SCHOOL?

PLACE DASHES IN UNUSED COLUMNS

	(A)		(B)	(C)	
				SCHOOL CHILD ATTENDS	
	MALE	FEMALE	SCHOOL GRADE	CATHOLIC	PUBLIC
28-29-30	1	2	1 2 3 4 5 6 7 8	1	2
31-33	1	2	1 2 3 4 5 6 7 8	1	2
34-36	1	2	1 2 3 4 5 6 7 8	1	2
37-39	1	2	1 2 3 4 5 6 7 8	1	2

Column #	(A)		(B)	(C)	
	Code			SCHOOL CHILD ATTENDS	
	MALE	FEMALE	SCHOOL GRADE	CATHOLIC	PUBLIC
40-42	1	2	1 2 3 4 5 6 7 8	1	2
43-45	1	2	1 2 3 4 5 6 7 8	1	2
46-48	1	2	1 2 3 4 5 6 7 8	1	2
49-51	1	2	1 2 3 4 5 6 7 8	1	2

10. This question applies to those with children of HIGH SCHOOL AGE. We would like to know the following facts about EACH CHILD.

(A) Is child (1) MALE or (2) FEMALE?
(B) What is the child's school grade (9-12)?
(C) Does child attend (1) CATHOLIC SCHOOL, or (2) PUBLIC SCHOOL?

	(A)		(B)				(C)	
							SCHOOL CHILD ATTENDS	
	MALE	FEMALE	SCHOOL GRADE				CATHOLIC	PUBLIC
			(1)	(2)	(3)	(4)		
52-54	1	2	9th	10th	11th	12th	1	2
55-57	1	2	9th	10th	11th	12th	1	2
58-60	1	2	9th	10th	11th	12th	1	2
61-63	1	2	9th	10th	11th	12th	1	2
64-66	1	2	9th	10th	11th	12th	1	2

67

11. Approximately how much is the combined weekly financial contribution of the MAIN WAGE EARNER and (if applicable) the SECONDARY WAGE EARNER to your parish?

1 None
2 $.01-$1.00
3 $1.01-$2.00
4 $2.01-$3.00
5 $3.01-$ .00

Column # Code

6 $5.01-$10.00
7 $10.01-$15.00
8 $15.01-$20.00
9 $20.01-$25.00
0 $25.01-$30.00
+ More than $30.00

68 12. This question applies to those with children of EITHER ELEMENTARY OR HIGH SCHOOL AGE.
Have you ever tried to enroll one of your children in a Catholic school and been unable to do so?

1 No
2 Yes, elementary school only
3 Yes, high school only
4 Yes, both elementary and high

69 13. If your answer to 12 is Yes, what was the principal reason you were unable to do so?

1 Financial reason
2 No room in school
3 Aptitude too low for admission
4 Other entrance requirements
5 Combination of above
6 Other
(SPECIFY)____________________

70 For Main Wage Earner
What kind of work do you do? Please circle the appropriate number below:

1. Professional, technical
2. Manager, official, proprietor, etc.
3. Clerical, secretarial, office
4. Sales personnel, sales clerk, etc.
5. Craftsman foreman (including construction)
6. Machine operator, semi-skilled labor, miner
7. Service trades, private household worker
8. Farmer (farm manager, labor, etc.)
9. Laborer - unskilled, etc.
10. Unemployed, retired, ill, etc.

Column #	Code
71-77	Blank
78-80	Study number (072)

Quality Control and the Data Available for Analysis

Of the 250 parishes of the Archdiocese of St. Louis that were surveyed in 1969, 160 parishes were chosen for inclusion in the analysis on the following bases: (1) Of the total number of financial questionnaires distributed to each parish, at least twenty had to be returned unless that number represented more than fifty percent of the parish sample; and (2) If more than twenty questionnaires were returned from a parish, that number had to reflect at least twenty percent of the parish sample. The number twenty was chosen for statistical purposes. Approximately sixty-four percent of all parishes surveyed were included in the empirical analysis.

The City of St. Louis had seventy-six parishes that were surveyed, forty-three of which were acceptable for analysis, a percent of 56.6. The St. Louis County had ninety-seven parishes, eighty-seven of which qualified on the above bases for a percentage of 89.7. Finally, the parishes in the areas outside St. Louis County number seventy-seven and only thirty fulfilled the above criteria for a 38.96 percent participation rate in the empirical analysis. The greatest participation occurred in the County parishes, although the St. Louis City parishes had a high rate of return on the financial questionnaires. The rural parishes outside St. Louis County had a low rate of return on the financial questionnaires.

In total, the 160 parishes and the data on each of them provided adequate information for the empirical analysis of the decision that is theoretically developed in the text. In fact, the geographical disaggregation of the sample to the city, county, and outside county levels does not constrain the analysis substantially. However, the thirty parish observations for the outside county parishes is relatively small and some statistical problems concerning degrees of freedom could emerge. This is a consideration beyond the possibility that the outside county parishes that were included in the analysis may not accurately reflect the entire sample since approximately thirty-eight percent actually qualified for inclusion.

APPENDIX F

THE ECONOMICS OF MINORITY EDUCATION IN CATHOLIC SCHOOLS

CONTENTS

Introduction 629

Enrollment 632

Costs and Revenues 640

THE ECONOMICS OF MINORITY EDUCATION IN CATHOLIC SCHOOLS

INTRODUCTION

The economist who remains within the limits of his professional expertise cannot claim special competence in resolving any controversy concerning the educational or moral desirability of integration over separatism in education. Abstracting from barriers to freedom of education choice based upon purely racial prejudice, separate education for ethnic minorities has been an accepted part even of Catholic education since its beginning, particularly among immigrant European Catholic groups. In a very real sense, the institution of Catholic full-time elementary and secondary schools was historically a deliberately segregationist policy on the part of American Catholics and has continued to be defended on moral and social grounds. Indeed, in the present context of appeals for public financial aid, the Catholic schools have defended their cultural individuality as a socially desirable contribution to educational pluralism in the United States. At the same time, some of the moral and social arguments used in behalf of racial integration of schools sound very similar to arguments used against continuation of religious schools and their alleged social devisiveness.

However, accepting the premise that the goals of racial integration and cultural pluralism are both desirable and consistent with one another as well as consistent with national goals of equality of educational opportunity, the economist can examine issues of economic equity and efficiency raised by a policy of racial integration in a nonpublic school system, issues that differ somewhat from their application to integration in the public schools. The issues concern enrollments, costs, revenues and the distribution of the economic burden of education. The issues have a special application to Catholic schools because of the unique split personality of Catholic school systems. Viewed from the perspective of economic analysis, Catholic school systems contain a mixture of characteristics from models of both public and private sectors.

On the one hand, Catholic schools provide services to both the Catholic community and to society at large that are considered public. A properly educated citizenry is presumably an asset to the entire community. One person's education confers benefits not only upon himself, but upon others, thereby rationalizing in terms of economic equity the use of public funds to subsidize schools. Thus, when racial integration comes to be a social goal of the entire community or nation and integration of the schools an integral part of the attainment of that goal, conventional principles of economic equity would also rationalize use of public funds to achieve school integration, despite varying personal preferences of individual taxpayers.

On the other hand, the demand for Catholic schooling unlike that of public education has the characteristics of demand for a private good, since financial support of the schools is voluntary, both through user costs such as tuition and fees and through contributions to the Church. Even the threat of ex-communication as a penalty for non-support of the schools can scarcely be an equivalent sanction to criminal penalties for nonpayment of taxes in the public sector. Moreover, Catholic schooling, like any private good, competes against substitutes, which in this case are virtually free goods for the parent who must pay the same taxes whether or not he sends his child to the public schools.

It is this voluntary nature of Catholic school support by its patrons and benefactors that has been a principal factor in the present economic crisis in Catholic elementary and secondary education. As described in the body of this report, a variety of changing demographic and taste factors have combined during the past several years to produce a steady decline in Catholic school enrollments through most parts of the country. These enrollment declines, coupled with sharp increases in school costs have created burdens and deficits that must be financed out of general church revenues, which in most places have not been rising at all proportionately to the growth in deficits.

Hence, any realistic consideration of the issues of enrollment, costs, and revenues raised by racial integration of the Catholic schools must be made in light of effects upon the larger questions of financial and economic survival of Catholic schools. Otherwise, the entire effort is likely to be academic and ultimately futile.

ENROLLMENT

Enrollment in Catholic schools can be a victim of racial discord if private preferences of Catholics about integration are inconsistent with social goals of Catholic education. For Catholic schools to elicit sufficient enrollment demand for survival as full-time schools systems it may be necessary or at least advisable that the educational services provided be sufficiently and favorably differentiated from those available through the relatively costless public substitute.

However, the type of product differentiation that might maximize total enrollment in Catholic schools in areas of high racial prejedice may be precisely the type that could work at cross-purposes with the pursuit of social goals of racial integration. Segregation academies, however economically justifiable to maximize enrollment within the analytic framework of Catholic schooling as a private good, would simply be inconsistent with the goals of Catholic education as a social or public good. Similarly, increases in minority enrollment through attempts to integrate Catholic schools may be more than offset by withdrawals of pupils from families opposed to racial integration.

How significant is this potential conflict between private preferences and social goals in Catholic education? Certainly there is at least some case evidence that attempts are being made to utilize Catholic schools in racially tense areas from the urban North to the rural South as havens for segregation. Still, it is not at all clear that total enrollment would be seriously jeopardized by vigorous administration of social goals and integration in Catholic school systems despite a prior resistance of some white Catholic groups.

The Saint Louis archdiocesan school system was one of the first major elementary and secondary school systems, public or private, with a sizable Black population to implement an official policy of integration during the 1950's. Econometric analysis of enrollment patterns of the most recent half decade since then indicates that the degree of integration in a given school is simply not a significant explanatory variable of enrollment trends. It is true that enrollment trends have been downward over this period. However, in multiple regression analysis the declines in enrollment are mostly explained by demographic variables, especially declining birthrates and declining baptismal rates relative to births, and to some extent in urban areas by the outmigration of center city residents. It is, of course, reasonable that at least some of the outmigration was racially motivated, so that declines in enrollment in Catholic schools that are now entirely Black have in fact been greater than the diocesan average. In some cases, it is possible that the presence of a Catholic school has delayed outmigration of Catholic families from transitional areas.

During the same period, however, the highest rates of enrollment decline in Catholic schools occurred in the highest income all-white areas of the dioceses, despite the fact that Catholic school quality in terms of teacher qualifications and levels of expenditures per pupil in these all-white Catholic schools were the highest in the archdiocese. Attitudes of upper income Catholics towards family size and Catholic education as well as the relatively high quality as perceived by parents of public schools in these areas, and not race, are held responsible for the relatively high rates of Catholic school enrollment decline in the all-white affluent city and suburban neighborhoods.

More significant, moreover, may be the fact that declines in Catholic elementary sxhool enrollment in racially mixed neighborhoods, particularly those with a high percentage of middle class Black families, have been no higher than the diocesan average over the past five years. At the same time it cannot be claimed that this is a typical integration situation. Whites opposed to integration would presumably have had ample opportunity to withdraw prior to the period tested. In addition, the Black families in these areas are probably above average in economic and social status within the Black population, so that they may be more socially acceptable to whites and more capable of bearing the financial burden of Catholic education.

Nevertheless, this analysis suggests that racial integration itself need not be the obstacle to maintenance of enrollment in a private voluntary school system that is sometimes alleged. Certainly analytic evidence suggests that any negative influence of integration upon Catholic school enrollment can scarcely be compared in significance to more fundamental changes in attitudes of Catholics towards support of traditional activities and teachings of the institutional Church with respect to family size and full-time Catholic schools. Maintenance of adequate levels of enrollment for survival of a broad based Catholic school system is not likely either to be assured or to be doomed by decisions made to integrate the Catholic schools. Far more important to future enrollment will be decisions by Catholics concerning such factors as family size, the perceived quality of Catholic education versus its public competition, and the future general loyalty of Catholics to the institutional Church.

This conclusion is supported by consideration of the fact that the total number of minority pupils in Catholic schools, including not only Blacks, but American Indians, Oriental Americans and Americans with Spanish surnames consititues less than 12 percent of Catholic elementary school enrollment and less than 8 percent of the enrollment in Catholic secondary schools. Blacks make up only slightly over 5 percent of Catholic elementary enrollment and less than 4 percent or one out of every 25 Catholic secondary school pupils. In addition, only about 16 percent of the minority group pupils in Catholic elementary schools and 14 percent of minority pupils in Catholic secondary schools are non-Catholics. Although non-Catholic Blacks constitute by far the largest proportion of all non-Catholic minorities in Catholic schools they still account for less than one-third of the total Black enrollment in Catholic schools.

This means simply that less than 2 percent of total Catholic elementary school enrollment and less than 1 percent of total Catholic secondary school pupils are Black and non-Catholic. Based upon average Catholic school cost figures for the regions in which they are enrolled, non-Catholic Black pupils absorb just 2.5 percent of the total operating expenditures of Catholic elementary schools and only 1.15 percent of the operating expenses of Catholic secondary schools in the nation.

This suggests that, since the vast majority of Black pupils are Catholic, racial integration of existing enrollments ought to be reasonably feasible to the extent that a common religious faith ought to remove one cultural barrier between Black and white classmates. Indeed, in one attitudinal study done by Notre Dame in a southern diocese, the educational goals sought by both white and Black Catholic parents were surprisingly similar. At the same time Black parents far more than whites felt the Catholic schools were superior to the available public schools, perhaps thereby reflecting existing racial discrimination within public schools. On the other hand, Catholic school enrollment data also imply that if the concept of integration is broadened to include a social goal often articulated for education in the sector and for certain tuition voucher proposals for aid to nonpublic schools such that the schools should achieve a racial balance equivalent to racial proportions in the population at large, regardless of religious composition, it is clear that Catholic schools are far from attainment of the goal.

Even with the less ambitious and more feasible concept of integration of existing enrollment, however, the distance to be covered is still relatively great. At present approximately one-third of all Black pupils, Catholic and non-Catholic, enrolled in Catholic elementary schools are enrolled in virtually all Black Catholic schools, that is, schools in which 98 percent or more of the pupils are Black. The historical absence of all-Black Catholic high schools probably accounts for the fact that only about 13 percent of the Black enrollment in Catholic secondary schools are in all-Black schools, but the same fact probably also explains the overall relative absence of Blacks in the total enrollment of Catholic secondary schools. Moreover, an additional 15 to 20 percent of the Blacks in Catholic elementary schools are enrolled in Catholic schools in which the enrollment is at least 80 percent Black. Consequently, over half the already small Black enrollment in Catholic elementary schools is enrolled in schools that under conventional definitions would not be called integrated, and the situation in Catholic secondary schools is only slightly better.

The data, not surprisingly, show that by far the highest percentage of the segregated Black enrollment is in the southeastern part of the nation, including Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, the Carolinas, Tennessee, Virginia, and West Virginia. These states account for only about 9 percent of national Catholic school enrollment but for approximately 20 percent of the total Black enrollment in Catholic schools. However, approximately two out of three of those Black students are enrolled in segregated Catholic schools, that is Catholic schools in which 80 percent or more of the enrollment is Black. The integration rate in the southeastern Catholic secondary schools is higher than in the elementary schools, so that only about half the Black secondary enrollment is in segregated schools; but this datum is offset by the fact that less than 18 percent of the southeastern total Black enrollment in Catholic schools is at the secondary level.

Not more than about 45 percent of the Black enrollment in Catholic schools in the rest of the nation are found in segregated Catholic schools, so that a Black child seeking a Catholic education has a 50 percent greater probability in the South of being placed in a segregated Catholic school. Expressed differently, the southern Catholic schools which account for 20 percent of the national Black enrollment also account for 30 percent of the segregated enrollment.

When attention is paid to the fact that almost 30 percent of the total Catholic school enrollment in the southeastern states mentioned is found in a single state, Louisiana, it becomes clearer that the purely economic burden of integration in terms of the numbers of pupils, teachers and schools likely to be affected is relatively concentrated and certainly not uniformly distributed throughout the country.

The small percentage of nationwide enrollment in Catholic schools that is Black, the even smaller percentage outside the South, and the even still smaller percentage enrolled in segregated Catholic schools outside the South means that only about 2 percent of total Catholic enrollment outside the South is Black and segregated. This fact simply reinforces the conclusion that for most of the nation a vigorous policy of racial integration of existing enrollments in Catholic schools is likely to have little negative impact upon disturbing downward enrollment trends in Catholic education.

It is even possible that vigorous integration policies might reverse the negative attitudes of some Catholic parents towards Catholic education, particularly in northern urban liberal locales. At the very least, the prospects for maintenance of Catholic school enrollment cannot be used as an administrative excuse for inaction in integration. Rather, the small numbers of minority pupils, especially of non-Catholic Blacks in Catholic schools through most of the nation, are more likely to be used as evidence of economic discrimination, and of the contention that Catholic schools are so largely restrictive in their white and middle class orientation that the that the large commitment of financial and human resources of the Church which they call forth can no longer be justified as an expression of public or social contribution by the Church.

COSTS AND REVENUES

The issue of resource costs of Catholic schools in their current financial crisis raises additional questions concerning racial integration. With increasingly widespread excess capacity in Catholic schools due to declining enrollments it is highly unlikely that racial integration would impose significant additional school costs upon existing programs of education within the schools. In some areas integration might actually ease the task of consolidation, by allowing for the closing of unnecessary segregated schools and more efficient use of remaining facilities. Offsetting these savings, however, particularly in the North where Catholic schools tend to be geographically concentrated in white areas, integration of existing segregated Black enrollments or recruitment of additional Black students may impose sizable financial and psychological costs of transportation upon families and the community.

Average annual operating costs per pupil for the entire nation are somewhat lower in Catholic elementary schools with over 80 percent minority enrollment than in elementary schools with over 80 percent white enrollment, though there is no similar difference at the secondary level. On the basis of this evidence it could be concluded that minority pupils are receiving less educational services than white pupils. This conclusion, however, would be valid only if the minority schools were geographically distributed in the same relative density as white schools. As indicated above, however, segregated schools are unevenly distributed relative to white schools, and Black schools tend to be concentrated in areas where costs per pupil in all Catholic schools are lower than national averages, that is, in the predominantly rural South.

In fact, in New England, the Mideast and the Plains States, operating costs per pupil in minority elementary schools are actually higher than in white schools. With allowance for the possibility of purely statistical errors, these differentials may be due to such factors as the concentration of minority schools in high cost urban areas as well as to falling enrollments in center city schools which tend to raise average costs per pupil in under-utilized schools which were originally built to serve a relatively high density middle class white Catholic population, but now must depend primarily upon a less densely Catholic minority population.

It is interesting to observe, however, that in the Southeast and the West average expenditures per pupil in Catholic elementary schools are considerably lower in minority schools than in white schools. In the absence of more refined data, however, it is difficult to conclude that this represents solely a discriminatory educational under-investment in minority pupils, since differences in expenditures per pupil can also be expected to vary directly with the incomes of the families upon whom the schools depend for financial support. Moreover, it is possible that most of the minority enrollment in these states is to be found outside urban areas, where educational costs may be lower, as for example among rural Blacks in the South or Spanish speaking migrant workers in the West.

On the other hand, the fact that at least in the Southeast the minority group, that is, the Black population, constitutes a relatively large share of total Catholic school enrollment as indicated earlier, reduces the likelihood that regional differences in family incomes and price levels can completely explain the differences in school costs. However, it is clearly possible, and there is some corroborating case study evidence, that differences between average incomes of Black families and white families that support their respective schools may explain much of the differential in school expenditures, particularly since the typical diocesan financial structure is lacking in tax and transfer mechanisms for redistribution of income and resources among parishes according to equity criteria of equalization.

Minority Catholic schools must frequently be as financially self-supporting as their white counterparts, despite the fact that Black family incomes are significantly lower than white family incomes. Lower expenditures per pupil in southeastern and western minority schools may thus reflect principally the inability of the present institutional church structure to ensure at least one level of equality of educational opportunity through equalization of school expenditures. The possibility of this kind of local financial constraint is supported by the fact that the minority schools in the Southeast and the West have lower rates of income from tuition and fees, probably relecting the lesser ability to pay of their patrons. With steadily rising tuition and fees to meet the escalating costs of Catholic education today, the atomistic laissez faire economic structure of Catholic education is likely to produce and automatic barrier of economic discrimination against expansion of minority enrollment. In such a situation, integration could at least provide some antidote for the Church for the larger forms of economic discrimination against racial minorities in our society over which the Church has no practical control. Integration could thus become an effective technique for the fiscal equalization among parishes and schools that cannot be easily achieved within the present atomistic financial structure of the Church with its free enterprise system of economically self-sufficient parishes.

Monetary operating expenditures of the schools, however, may themselves be a misleading indicator of resource costs of Catholic education for minority pupils, even after allowance is made for regional differences in incomes and price levels over which the Church has no control. The reason, of course, is to be found in the contributed services of religious teachers, which are not included in monetary expenditures but which represent real resources committed to the education of Catholic school pupils.

In fact, there is some evidence that the allocation of religious teachers in some dioceses works towards an equalizing redistribution of educational resources that may not be possible through conventional financial chance for mechanisms. By allocating to minority schools a higher than average proportion of well qualified religious teachers, whose degree, status and teaching experience would command high salaries in the open market, some orders and dioceses have been able to subsidize the relatively low monetary eduational expenditures of minority schools in less affluent areas.

This form of redistribution has been evident in school analyses done both in the North and the South, as in the Youngstown diocesan school system some years ago and more recently and more explicitly in studies of the Catholic schools in Mississippi and Saint Louis. Thus, while the numbers of religious teachers have declined in most of the major urban Catholic school systems, the number of religious teachers in the state of Mississippi has held virtually constant for the past twelve years. So, too, in the city of Saint Louis, whereas the center city Black Catholic elementary schools had the lowest monetary operating expenditures per pupil, when prevailing market values were imputed to the contributed services of religious teachers, these same schools were found to have the highest levels of resource commitment per pupil, matched only by schools in the most affluent parishes. In terms of the value of real resources expended per pupil, it was the mostly white lower middle income parishes, the "hard hat" schools, rather than the ghetto schools that had the smallest commitment per pupil, since these parishes were neither the recipient of religious teacher subsidies, nor financially capable of hiring comparable lay teachers.

The ability to use the allocation of religious teachers to accomplish social goals of resource redistribution is of course limited by declines in the numbers of active religious teachers. Nevertheless, there remains a substantial opportunity for religious teachers to act as the principal means for equalization of educational resources, particularly in urban areas where residential living patterns and high transportation costs make integration less feasible economically.

Of course, in areas where integration is feasible the religious orders can do much to shape Catholic school integration policy. Under present financial constraints of operating Catholic schools, the collective contribution of religious teachers to Catholic schools can mark the difference between survival and collapse, and hence a collective policy in favor of integration on the part of religious teaching orders, perhaps as a condition for employment in a given school system, can exercise strong economic leverage. In several places in the South the religious orders of teachers have already used their economic leverage to elicit administrative decisions in favor of school integration. Moreover, religious orders could if they chose perform part of the function of financial redistribution within the Church by insisting upon higher salaries in more affluent areas in order to subsidize their own teaching efforts in low income minority areas.

Of course, equality of educational opportunity may be interpreted in a more costly manner than implied by mere integration or by equalization of educational resource allocation. Equality of educational opportunity may also be defined in terms of outputs rather than inputs. If formal schooling is seen as part of an educational process that begins in the home and extends to the environment, then educational deficiencies in both those areas will be reflected in unequal school performance for equal resources. Multiple regression analysis of productivity of Saint Louis Catholic elementary schools where output was measured by pupil performance on standardized tests of achievement in basic skills revealed the extent of these deficiencies as related to the enrollment of Black pupils. While pupil performance in the schools on the average was significantly above national norms, and educational inputs such as expenditures per pupil were related positively to pupil performance, it was also true that the ratio of Black enrollment to total enrollment in individual schools was negatively related to average pupil performance in individual schools. The higher the proportion of Black pupils, other inputs being held constant, the lower the average achievement levels in basic skills.

Although a racist might interpret these results as an argument against integration, more rational analysis would suggest the need for additional educational resources for minority students where necessary to compensate for educational deficiencies of the home and environment, if equality of educational opportunity is to be measured by output rather than by input. This stricter goal of equality, of course, raises the cost of effective integration and places greater economic responsibility on Catholic school systems that are already financially vulnerable. Coupled with rapidly escalating costs for existing forms of education, and the inability of low income minorities to bear high tuition charges, it is unlikely that effective compensatory education can be provided on a wide scale in Catholic schools, particularly to an expanded minority enrollment, without voluntary financial support from the larger Catholic community or from the public sector.

Despite the rising costs of Catholic school operations, it is still true and verified in a variety of studies throughout the country that Catholics as a whole contribute only about 1 percent of their total family incomes to subsidize adequately the current deficits of their schools, which at the elementary level average over half the total costs of operation. Hence, despite popular complaints, it cannot be argued that Catholics are unable to afford the costs of educating more minority pupils more effectively. The contribution of an additional 1 percent of Catholic family incomes could double the total amount of Church subsidy available to the schools. However, in light of the present deterioration in the preferences of many Catholics, especially among the affluent, for full-time Catholic education, in light of the historically small commitment of Catholic education to minority enrollment, and in light of the laissez faire tradition of self-sufficiency among Catholic parishes, it is questionable whether minority education can be raised to a notch on the scale of Catholic consumption priorities to elicit the contribution of an additional percentage point of family incomes.

The attraction of public aid, especially state aid, to nonpublic schools as an assist to racial integration and minority education thus becomes obvious. State aid proposals, which have been introduced, passed or failed in at least forty states, can be grouped into four economic categories: (1) direct non-monetary aid in the form of auxiliary goods and services to nonpublic schools; (2) purchase of service contracts with nonpublic schools, especially for the services of teachers; (3) formulas for direct aid to nonpublic schools; (4) tuition grants and vouchers for families with pupils in nonpublic schools.

All would offer some assistance to Catholic school integration and minority education, but even apart from Constitutional obstacles, each presents its own special difficulties. Auxiliary services could be tailored to the needs of minority students, but they would not relieve the basic economic burden of already hardpressed schools, and hence would probably not help stem the tide of school closings. Purchase of service contracts to subsidize a percentage of teachers' salaries would provide relatively less help to low income area schools already dependent upon low salaried religious teachers, unless salary formulas for religious teachers within the Church are completely revised. Direct financial aid to nonpublic schools could be diverted from minority education unless explicit and perhaps administratively burdensome conditions were attached to the aid.

Tuition vouchers give parents maximum freedom of choice and hence are especially popular with those who seek more pluralism in education. However, it is not clear that vouchers would assist integration, though they might assist other efforts in minority education. Vouchers would probably be highly compatible with the atomistic characteristics of existing Catholic schools and hence might enhance any tendencies towards segregation within Catholic schools, particularly in the South where there is some fear that Catholic schools may become segregationist havens from integrated public education. On the other hand, vouchers would also give freedom of choice to minority groups and allow for the kind of separatist minority education that is favored by some as an intermediate step to integration, but which also could be as socially divisive as the white segregation academy. If school eligibility for voucher aid were based upon a strict criterion of racial balance in enrollment, it is not clear that many Catholic schools could or would attract the necessary increase in minority enrollment to qualify, for reasons already stated.

In sum, no form of public aid likely to be introduced is free from economic difficulties and risks when applied to the task of minority education in Catholic schools. Nor, even if Constitutional, are the amounts of aid likely to be sufficient to change the racial complexion of Catholic education without a will to do so within the Catholic community.

APPENDIX G

PROJECTION OF CATHOLIC SCHOOL ENROLLMENT FOR 1975 AND 1980, BY STATE AND REGION

CONTENTS

Catholic Elementary School Enrollment - Actual 1970 and Forecasts for 1975 and 1980, by State and Region 653

Catholic Secondary School Enrollment - Actual 1970 and Forecasts for 1975 and 1980, by State and Region 655

Non-Catholic Nonpublic School Enrollment K-12 - Actual 1970 and Forecasts for 1975 and 1980, by State and Region 657

Nonpublic School Enrollment K-12 - Actual 1970 and Forecasts for 1975 and 1980, by Region 660

PROJECTION OF CATHOLIC SCHOOL ENROLLMENT FOR 1975 AND 1980, BY STATE AND REGION

The analysis of Catholic school enrollment by central city, suburban, and rural indicates the greatest decline in enrollment will occur in Catholic elementary schools in the Northeast and North Central regions of the country. In these two regions, enrollment will be approximately 40 percent of 1970 enrollment in 1980. These two regions have 76 percent of all students in Catholic schools. The South and West regions are projected to decline to 48 percent of 1970 by 1980.

The relative decline of enrollment in the central cities, suburbs, and rural areas are relatively constant for all regions. However, the relative demand for parochial education remains higher in the central city because of the movement of Catholics from the central city to the suburbs.

Our projections for secondary school enrollment are more optimistic than for the elementary schools. By 1980, 64 percent of 1970 enrollment is expected in the Northeast and North Central regions. In the South and West, the corresponding percentages attending Catholic secondary schools are 87 and 75 respectively. These projections undoubtedly err on the high side. There is no way that we have been able to measure accurately the probable acceleration in declining enrollment which we feel will probably occur, particularly on the secondary level.

TABLE 1. Catholic Elementary School Enrollment - Actual 1970, and Forecasts for 1975 and 1980, by State and Region.

	Central City SMSA			Other SMSA			Rural			State Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
Northeast												
Connecticut	34,104	23,284	15,742	26,812	18,740	12,970	3,674	1,476	588	64,590	43,500	29,300
Maine	3,820	1,114	278	1,243	1,088	815	5,612	2,298	807	10,675	4,500	1,900
Massachusetts	60,184	43,811	31,583	68,269	41,003	24,387	621	286	130	129,074	85,100	56,100
New Hampshire	5,404	2,950	1,620	6,160	3,574	2,086	6,760	4,176	2,594	18,324	10,700	6,300
New Jersey	46,414	34,559	25,557	109,964	68,669	42,591	58,092	42,272	30,552	214,470	145,500	98,700
New York	248,518	156,737	98,686	231,038	150,561	97,948	40,682	22,702	12,666	520,238	330,000	209,300
Pennsylvania	167,629	103,148	63,378	163,571	94,201	54,228	27,134	15,151	8,394	358,334	212,500	126,000
Rhode Island	9,269	4,172	1,859	17,041	9,128	4,841	0	0	0	26,310	13,300	6,700
Vermont	0	0	0	0	0	0	5,571	2,100	800	5,571	2,100	800
TOTAL NORTHEAST	575,342	369,775	238,703	624,098	386,964	239,866	148,146	90,461	56,531	1,347,586	847,200	535,100
North Central												
Illinois	148,196	99,400	66,485	100,486	64,000	40,670	53,975	31,000	17,745	302,657	194,400	124,900
Indiana	40,359	25,700	16,299	13,289	9,310	6,496	17,171	10,090	5,905	70,819	45,100	28,700
Iowa	19,356	7,531	2,901	6,369	2,498	970	21,006	9,471	4,229	46,731	19,500	8,100
Kansas	13,144	6,060	2,768	1,396	686	334	10,699	4,154	1,598	25,239	10,900	4,700
Michigan	66,272	40,489	24,721	71,598	46,391	30,048	24,085	14,520	8,731	161,955	101,400	63,500
Minnesota	29,183	12,148	5,047	18,830	6,970	2,575	32,728	11,982	4,378	80,741	31,100	12,000
Missouri	33,436	20,166	12,166	50,320	32,342	20,790	8,253	5,092	3,144	92,009	57,600	36,100
Nebraska	17,689	9,982	5,613	539	267	132	11,947	6,151	3,155	30,175	16,400	8,900
North Dakota	1,313	992	739	0	0	0	6,962	3,908	2,161	8,275	4,900	2,900
Ohio	161,451	115,738	70,850	51,829	37,420	41,635	28,720	22,842	15,515	242,000	176,000	128,000
South Dakota	1,693	1,127	736	282	168	98	5,670	3,105	1,666	7,645	4,400	2,500
Wisconsin	46,333	28,998	18,115	36,592	22,926	14,337	46,475	31,676	21,548	129,400	88,600	54,000
TOTAL NORTH CENTRAL	578,425	368,331	226,440	351,530	222,978	158,085	267,691	153,991	89,775	1,197,646	745,300	474,300
South												
Alabama	10,588	8,740	7,226	2,550	2,274	2,030	1,307	986	744	14,445	12,000	10,000
Arkansas	4,072	3,556	3,075	276	283	287	2,481	1,761	1,238	6,829	5,600	4,600
Delaware	4,751	3,857	2,984	7,434	3,945	1,995	699	298	121	12,884	8,100	5,100

TABLE 1. Catholic Elementary School Enrollment - Actual 1970, and Forecasts for 1975 and 1980, by State and Region (continued).

	Central City SMSA			Other SMSA			Rural			State Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
South (continued)												
Florida	28,751	27,559	26,422	19,794	18,995	18,232	12,059	11,746	11,446	60,604	58,300	56,100
Georgia	7,593	6,280	5,079	2,649	2,828	2,952	1,000	692	469	11,242	9,800	8,500
Kentucky	23,259	8,401	3,003	12,255	5,678	2,604	9,457	4,021	1,693	44,971	18,100	7,300
Louisiana	39,442	28,062	19,807	24,123	20,946	18,042	25,771	21,292	17,451	89,336	70,300	55,300
Maryland	21,770	19,120	15,283	19,847	8,562	3,362	5,160	3,418	2,055	46,777	31,100	20,700
Mississippi	3,802	2,975	2,250	407	147	50	5,826	3,478	2,000	10,035	6,600	4,300
North Carolina	6,100	5,020	3,950	250	530	1,070	4,475	3,850	3,180	10,825	9,400	8,200
Oklahoma	4,872	2,900	1,636	410	120	35	1,400	580	229	6,682	3,600	1,900
South Carolina	4,218	3,627	3,030	751	340	150	1,722	1,533	1,320	6,691	5,500	4,500
Tennessee	9,382	4,715	2,313	1,254	925	666	1,045	360	121	11,681	6,000	3,100
Texas	55,664	30,454	16,631	6,692	3,561	1,890	10,151	5,685	3,179	72,507	39,700	21,700
Virginia	7,801	4,000	2,034	9,933	5,380	2,893	4,259	1,820	773	21,993	11,200	5,700
West Virginia	1,843	294	42	2,490	1,481	795	3,520	1,725	763	7,853	3,500	1,600
Washington, D. C.	35,706	21,800	13,300	0	0	0	0	0	0	35,706	21,800	13,300
TOTAL SOUTH	269,614	181,360	128,065	111,115	75,995	57,053	90,332	63,245	46,782	471,061	320,600	231,900
West												
Alaska	0	0	0	0	0	0	365	100	0	365	100	0
Arizona	9,860	8,063	6,562	2,458	1,856	1,395	4,738	3,481	2,543	17,056	13,400	10,500
California	86,211	58,623	39,804	127,473	93,434	68,384	10,842	7,943	5,812	224,526	160,000	114,000
Colorado	17,301	12,372	8,770	904	681	509	2,886	1,547	821	21,091	14,600	10,100
Hawaii	5,547	4,718	3,900	3,399	3,846	4,229	2,140	1,536	1,071	11,086	10,100	9,200
Idaho	1,000	828	643	0	0	0	2,685	1,372	657	3,685	2,200	1,300
Montana	2,141	1,039	489	0	0	0	4,540	2,061	911	6,681	3,100	1,400
Nevada	2,393	1,704	1,161	0	0	0	723	796	839	3,116	2,500	2,000
New Mexico	3,627	1,592	671	169	139	123	4,994	2,169	906	8,790	3,900	1,700
Oregon	9,502	5,474	3,150	4,521	2,553	1,460	1,570	673	290	15,593	8,700	4,900
Utah	1,836	1,070	640	611	378	240	143	52	20	2,590	1,500	900
Washington	16,455	9,916	5,861	5,142	4,048	3,126	4,799	2,336	1,113	26,396	16,300	10,100
Wyoming	0	0	0	0	0	0	2,043	1,000	500	2,043	1,000	500
TOTAL WEST	155,873	105,399	71,651	144,677	106,935	79,466	42,468	25,066	15,483	343,018	237,400	166,600

TABLE 2. Catholic Secondary School Enrollment - Actual 1970, and Forecasts for 1975 and 1980, by State and Region.

	Central City SMSA			Other SMSA			Rural			State Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
Northeast												
Connecticut	10,842	10,238	9,658	8,365	7,508	6,732	1,909	1,754	1,610	21,116	19,500	18,000
Maine	1,001	543	272	0	0	0	514	127	28	1,515	670	300
Massachusetts	23,287	13,385	7,689	21,504	12,115	6,811	0	0	0	44,791	25,500	14,500
New Hampshire	1,149	594	297	1,613	1,103	729	1,275	703	374	4,037	2,400	1,400
New Jersey	16,377	14,554	12,902	30,155	30,641	31,056	14,010	13,005	12,042	60,542	58,200	56,000
New York	89,512	62,866	43,829	48,931	39,667	31,921	9,129	5,467	3,250	147,572	108,000	79,000
Pennsylvania	64,032	53,949	45,294	40,564	35,164	30,365	7,212	4,987	3,541	111,808	94,100	79,200
Rhode Island	3,960	3,211	2,614	3,456	2,679	2,086	0	0	0	7,416	5,890	4,700
Vermont	0	0	0	0	0	0	1,937	1,090	600	1,937	1,090	600
TOTAL NORTHEAST	210,160	159,340	122,555	154,588	128,877	109,700	35,986	27,133	21,445	400,734	315,350	253,700
North Central												
Illinois	51,644	43,900	37,150	27,282	23,800	20,940	14,447	12,660	11,110	93,373	80,360	69,200
Indiana	15,291	11,195	8,030	1,412	1,149	915	1,806	686	255	18,509	13,030	9,200
Iowa	9,380	6,293	4,093	2,380	1,726	1,214	5,149	2,411	1,093	16,909	10,430	6,400
Kansas	4,717	3,117	2,020	458	360	278	2,725	1,583	902	7,900	5,060	3,200
Michigan	27,101	17,393	10,881	20,769	17,657	14,634	5,166	2,800	1,485	53,036	37,850	27,000
Minnesota	13,189	10,680	8,328	0	0	0	5,599	2,720	1,272	18,788	13,400	9,600
Missouri	18,250	13,785	10,276	9,578	8,633	7,680	1,354	782	444	29,182	23,200	18,400
Nebraska	6,527	5,015	3,856	564	343	208	4,525	3,452	2,636	11,616	8,810	6,700
North Dakota	644	538	420	0	0	0	2,204	1,062	480	2,848	1,600	900
Ohio	60,916	58,363	55,800	8,744	7,550	6,500	6,435	5,387	4,500	76,095	71,300	66,800
South Dakota	840	919	982	138	156	173	1,423	1,175	945	2,401	2,250	2,100
Wisconsin	15,843	9,552	5,632	3,354	2,963	2,558	5,795	3,275	1,810	24,992	15,790	10,000
TOTAL NORTH CENTRAL	224,342	180,750	147,468	74,679	64,337	55,100	56,628	37,993	26,932	355,649	283,080	229,500
South												
Alabama	3,019	2,000	1,300	0	0	0	0	0	0	3,019	2,000	1,300
Arkansas	1,607	1,367	1,133	0	0	0	756	718	667	2,363	2,085	1,800
Delaware	3,163	3,042	2,807	593	337	183	202	151	110	3,958	3,530	3,100
Florida	12,332	13,619	12,788	2,494	6,862	16,052	2,474	3,219	3,560	17,300	23,700	32,400
Georgia	3,457	3,100	2,800	0	0	0	0	0	0	3,457	3,100	2,800

TABLE 2. Catholic Secondary School Enrollment - Actual 1970, and Forecasts for 1975 and 1980, by State and Region (continued).

	Central City SMSA			Other SMSA			Rural			State Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
South (continued)												
Kentucky	12,034	6,242	3,160	2,176	1,607	1,140	733	201	0	14,943	8,050	4,300
Louisiana	20,160	19,865	19,481	1,120	1,435	1,829	8,278	8,100	7,890	29,558	29,400	29,200
Maryland	6,948	6,389	5,896	5,571	4,879	4,288	1,376	1,182	1,016	13,895	12,450	11,200
Mississippi	1,352	1,520	1,666	0	0	0	1,877	1,600	1,334	3,229	3,120	3,000
North Carolina	960	690	400	0	0	0	0	0	0	960	690	400
Oklahoma	2,000	1,220	700	0	0	0	65	0	0	2,065	1,220	700
South Carolina	1,044	670	365	247	370	465	132	100	70	1,423	1,140	900
Tennessee	4,780	4,030	3,400	0	0	0	0	0	0	4,780	4,030	3,400
Texas	17,349	15,300	13,100	1,152	1,051	700	1,019	249	300	19,520	16,600	14,100
Virginia	2,950	2,758	2,563	1,358	1,093	874	1,546	1,159	863	5,854	5,010	4,300
West Virginia	2,357	1,171	581	159	62	24	702	257	95	3,218	1,490	700
Washington, D. C.	12,821	11,890	11,000	0	0	0	0	0	0	12,821	11,890	11,000
TOTAL SOUTH	108,333	94,873	83,140	14,870	17,696	25,555	19,160	16,936	15,905	142,363	129,505	124,600
West												
Alaska	0	0	0	0	0	0	367	200	100	367	200	100
Arizona	3,835	3,800	3,752	305	233	178	425	397	370	4,565	4,430	4,300
California	36,167	29,264	23,387	37,297	36,483	35,250	1,729	993	563	75,193	66,740	59,200
Colorado	5,260	4,076	3,137	0	0	0	641	484	363	5,901	4,560	3,500
Hawaii	3,227	3,206	3,168	0	0	0	681	544	432	3,908	3,750	3,600
Idaho	470	379	267	0	0	0	219	91	33	689	470	300
Montana	957	401	154	0	0	0	1,937	969	446	2,894	1,370	600
Nevada	1,057	1,000	900	0	0	0	0	0	0	1,057	1,000	900
New Mexico	707	228	96	0	0	0	794	252	104	1,501	480	200
Oregon	2,946	1,860	1,010	1,178	1,660	2,010	514	640	680	4,638	4,160	3,700
Utah	941	710	500	0	0	0	22	0	0	963	710	500
Washington	6,775	5,880	5,019	0	0	0	1,093	650	381	7,868	6,530	5,400
Wyoming	0	0	0	0	0	0	173	0	0	173	0	0
TOTAL WEST	62,342	50,804	41,390	38,780	38,376	37,438	8,595	5,220	3,472	109,717	94,400	82,300

TABLE 3. Non-Catholic Nonpublic School Enrollment K-12 - Actual 1970 and Forecasts for 1975 and 1980, by State and Region.

	Central City SMSA			Other SMSA			Rural			State Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
Northeast												
Connecticut	6,403	5,694	5,096	16,992	15,111	13,524	1,231	1,095	980	24,626	21,900	19,600
Maine	313	280	252	470	420	378	7,048	6,300	5,670	7,831	7,000	6,300
Massachusetts	5,606	5,004	4,464	23,360	20,850	18,600	2,180	1,946	1,736	31,146	27,800	24,800
New Hampshire	590	525	470	8,613	7,665	6,862	2,596	2,310	2,068	11,799	10,500	9,400
New Jersey	4,236	3,780	3,384	15,534	13,860	12,408	3,766	3,360	3,008	23,536	21,000	18,800
New York	88,604	87,040	77,792	29,969	29,440	26,312	11,727	11,520	10,296	130,300	128,000	114,400
Pennsylvania	18,351	16,340	14,592	23,664	21,070	18,816	6,278	5,590	4,992	48,293	43,000	38,400
Rhode Island	3,537	3,116	2,788	776	684	612	0	0	0	4,313	3,800	3,400
Vermont	0	0	0	0	0	0	5,022	4,500	4,000	5,022	4,500	4,000
Total Northeast	127,640	121,779	108,838	119,378	109,100	97,512	39,848	36,621	32,750	286,866	267,500	239,100
North Central												
Illinois	22,835	20,172	17,876	19,492	17,220	15,260	13,367	11,808	10,464	55,694	49,200	43,600
Indiana	9,118	8,036	7,105	3,908	3,444	3,045	5,582	4,920	4,350	18,608	16,400	14,500
Iowa	1,118	988	871	86	76	67	7,395	6,536	5,762	8,599	7,600	6,700
Kansas	1,707	1,517	1,332	554	492	432	2,354	2,091	1,836	4,615	4,100	3,600
Michigan	22,094	19,530	17,325	23,076	20,398	18,095	3,928	3,472	3,080	49,098	43,400	38,500
Minnesota	5,384	4,770	4,230	2,333	2,067	1,833	10,231	9,063	8,037	17,948	15,900	14,100
Missouri	4,021	3,553	3,154	12,486	11,033	9,794	4,656	4,114	3,652	21,163	18,700	16,600
Nebraska	1,536	1,357	1,196	801	708	624	4,342	3,835	3,380	6,679	5,900	5,200
North Dakota	326	300	270	0	0	0	760	700	630	1,086	1,000	900
Ohio	3,201	2,835	2,520	14,084	12,474	11,088	4,055	3,591	3,192	21,340	18,900	16,800
South Dakota	260	228	204	43	38	34	1,865	1,634	1,462	2,168	1,900	1,700
Wisconsin	13,672	12,078	10,692	9,529	8,418	7,452	18,229	16,104	14,256	41,430	36,600	32,400
Total North Central	85,272	75,364	66,775	86,392	76,368	67,724	76,764	67,868	60,101	248,428	219,600	194,600
South												
Alabama	5,218	4,922	4,508	1,021	963	882	5,105	4,815	4,410	11,344	10,700	9,800
Arkansas	213	195	182	131	120	112	1,296	1,185	1,106	1,640	1,500	1,400
Delaware	2,084	1,980	1,782	821	780	702	253	240	216	3,158	3,000	2,700

TABLE 3. Non-Catholic Nonpublic School Enrollment K-12 - Actual 1970 and Forecasts for 1975 and 1980, by State and Region (continued).

	Central City SMSA			Other SMSA			Rural			State Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
Washington	4,587	4,366	4,070	4,340	4,130	3,850	3,471	3,304	3,080	12,398	11,800	11,000
Wyoming	0	0	0	0	0	0	257	200	100	257	200	100
Total West	60,541	57,426	53,480	73,531	69,797	65,089	21,097	19,977	18,331	155,169	147,200	136,900
Total United States	387,140	361,506	327,051	321,656	295,095	266,804	205,997	188,699	170,045	914,793	845,300	763,900

TABLE 3. Non-Catholic Nonpublic School Enrollment K-12 - Actual 1970 and Forecasts for 1975 and 1980, by State and Region (continued).

	Central City SMSA			Other SMSA			Rural			State Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
Florida	17,905	16,848	15,444	6,887	6,480	5,940	9,641	9,072	8,316	34,433	32,400	29,700
Georgia	8,182	7,695	7,068	2,010	1,890	1,736	4,162	3,915	3,596	14,354	13,500	12,400
Kentucky	3,073	2,925	2,665	236	225	205	1,419	1,350	1,230	4,728	4,500	4,100
Louisiana	10,428	9,796	8,990	3,868	3,634	3,335	2,523	2,370	2,175	16,819	15,800	14,500
Maryland	5,866	5,512	5,044	13,988	13,144	12,028	2,707	2,544	2,328	22,561	21,200	19,400
Mississippi	1,551	1,470	1,344	591	560	512	5,246	4,970	4,544	7,388	7,000	6,400
North Carolina	4,749	4,472	4,108	456	430	395	3,927	3,698	3,397	9,132	8,600	7,900
Oklahoma	1,886	1,748	1,596	0	0	0	595	552	504	2,481	2,300	2,100
South Carolina	4,770	4,488	4,125	1,446	1,360	1,250	8,241	7,752	7,125	14,457	13,600	12,500
Tennessee	11,254	10,512	9,648	1,563	1,460	1,340	2,813	2,628	2,412	15,630	14,600	13,400
Texas	21,586	20,328	18,634	3,084	2,904	2,662	3,364	3,168	2,904	28,034	26,400	24,200
Virginia	8,442	7,938	7,263	6,253	5,880	5,380	16,572	15,582	14,257	31,267	29,400	26,900
West Virginia	441	408	357	0	0	0	424	392	343	865	800	700
Washington, D. C.	6,039	5,700	5,200	0	0	0	0	0	0	6,039	5,700	5,200
Total South	113,687	106,937	97,958	42,355	39,830	36,479	68,288	64,233	58,863	224,330	211,000	193,300
West												
Alaska	0	0	0	0	0	0	444	400	300	444	400	300
Arizona	3,482	3,355	3,111	1,199	1,155	1,071	1,027	990	918	5,708	5,500	5,100
California	29,778	28,260	26,370	63,528	60,288	56,256	5,956	5,652	5,274	99,262	94,200	87,900
Colorado	4,939	4,674	4,332	2,513	2,378	2,204	1,213	1,148	1,064	8,665	8,200	7,600
Hawaii	10,788	10,234	9,546	878	833	777	878	833	777	12,544	11,900	11,100
Idaho	124	119	105	18	17	15	1,637	1,564	1,360	1,779	1,700	1,500
Montana	172	168	156	0	0	0	1,263	1,232	1,144	1,435	1,400	1,300
Nevada	407	352	352	0	0	0	55	48	48	462	400	400
New Mexico	1,986	1,862	1,715	0	0	0	2,068	1,938	1,785	4,054	3,800	3,500
Oregon	3,821	3,604	3,339	865	816	756	2,524	2,380	2,205	7,210	6,800	6,300
Utah	457	432	384	190	180	160	304	288	256	951	900	800

TABLE 4. Nonpublic School Enrollment K-12 - Actual 1970 and Forecasts for 1975 and 1980, By Region.

Region	Central City SMSA			Other SMSA			Rural			Total		
	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)	1970 (Actual)	1975 (Projected)	1980 (Projected)
Northeast	913,142	650,894	470,096	898,064	624,941	447,078	223,980	154,215	110,726	2,035,186	1,430,050	1,027,900
North Central	888,039	624,445	440,683	512,601	363,683	280,909	401,083	259,852	176,808	1,801,723	1,247,980	898,400
South	491,634	383,170	309,163	168,340	133,521	119,087	177,780	144,414	121,550	837,754	661,105	549,800
West	278,756	213,629	166,521	256,988	215,108	181,993	72,160	50,263	37,286	607,904	479,000	385,800
TOTAL UNITED STATES	2,571,571	1,872,138	1,386,463	1,835,993	1,337,253	1,029,067	875,003	608,744	446,370	5,282,567	3,818,135	2,861,900

669

U.S. GOVERNMENT PRINTING OFFICE : 1972 O - 453-179